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**CTD MEASUREMENTS COLLECTED ON A CLIMATE AND GLOBAL CHANGE
CRUISE (WOCE SECTION P16N) ALONG 152°W DURING FEBRUARY-APRIL,
1991**

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CTD Measurements Collected on a Climate and Global Change Cruise (WOCE Section P16N) Along 152°E During February–April, 1991

K.E. McTaggart and L.J. Mangum

ABSTRACT. Summaries of Neil Brown Instrument Systems CTD measurements and hydrographic data acquired on a Climate and Global Change cruise during the spring of 1991 aboard the NOAA ship *Discoverer* are presented. The majority of these data were collected along 152°W from 22°N to 53.5°N. Data collected along 135°W from 50°N to 35°N, along a SW-NE dog-leg from 20°N, 155°W to the beginning of the 152°W line at 22°N, and along a SE-NW dog-leg from the end of the 152°W line at 53.5°N to 56.3°N, 153.2°W are also presented. Data acquisition and processing systems are described and calibration procedures are documented. Station location, meteorological conditions, CTD summary data listings, profiles, and potential temperature-salinity diagrams are included for each cast. Section plots of oceanographic variables and hydrographic data listings are also given.

1. INTRODUCTION

In support of NOAA's Climate Program, PMEL scientists have been measuring the growing burden of greenhouse gases in the thermocline waters of the Pacific Ocean and the overlying atmosphere since 1980. During leg 1 of this cruise, hydrographic and chemical measurements began with a series of stations along 135°W from 50°N to 35°N. Leg 2 began with a SW-NE dog-leg from 20°N, 155°W to the beginning of the 152°W line at 22°N. P16N stations extended northward at approximately 40-mile spacing along 152°W to 53.5°N. The section then turned northwestward and stations were occupied to the 200-m isobath off Kodiak Island. Full water column CTD profiles and a suite of anthropogenic and natural tracers including chlorofluorocarbons (CFCs), helium-tritium, radiocarbon, total CO₂, dissolved oxygen, dissolved nutrients, and salinity were collected. These measurements will be used to study the distribution, sources, and formation rates of water masses and their flow patterns and time scales. The CFC and tritium measurements will be of use in studying the rates of upper and intermediate water mass formation and transport processes. CO₂ measurements will be used to study the flux of CO₂ from atmosphere to ocean and the importance of this region as a sink for CO₂.

A test station was occupied at 49°N, 127.5°W off Vancouver Island during the transit from Seattle to the start of leg 1 at 50°N, 135°W to check the CTD/rosette system. Samples were drawn from 10-liter Niskin bottles to check for CFC contamination and to test analytical equipment. Eleven stations followed from 50°N to 35°N. Nominal station spacing was 60 miles. After leaving the 135°W line, the ship transited to Hilo, Hawaii. Two stations were occupied at the end of leg 1 on the SW-NE dog-leg planned for leg 2. An additional five stations were occupied along this dog-leg at the beginning of leg 2. These were followed by 39 stations along WOCE line P16N at approximately 40-mile spacing. At 53.5°N, 152°W the line turned northwestward and 8 stations were occupied to the 200-m isobath off Kodiak Island. Figures 1a and 1b show the cruise track and

station locations for leg 1 (CG191). Figures 2a and 2b show the cruise track and station locations for leg 2 (CG291). Table 1 provides a summary of cast information.

2. STANDARDS AND PRE-CRUISE CALIBRATIONS

The Neil Brown Mark IIIb CTD profiler is designed to make precise, high-resolution measurements of conductivity, temperature, and pressure in the ocean environment. Electrical conductivity of seawater is obtained using a miniature four-electrode ceramic cell and highly precise and stable interface electronics. The EG&G conductivity sensor has a range of 1 to 65 mmho, an accuracy of ± 0.005 mmho, resolution of 0.001 mmho, and stability of 0.003 mmho/month. Temperature is determined using a platinum resistance thermometer. The Rosemount platinum thermometer has a range of -32° to 32°C , an accuracy of $\pm 0.005^{\circ}\text{C}$ (-3° to 32°C), resolution of 0.0005°C , and stability of $0.001^{\circ}\text{C}/\text{month}$. Pressure is determined using a high performance stainless steel strain gauge pressure transducer. A thermistor within the pressure sensor housing corrects pressure values for the effects of temperature changes on the sensor itself. The Paine pressure sensor has a range of 0 to 6500 db, an accuracy of ± 6.5 db, resolution of 0.1 db, and stability of $0.1\%/\text{month}$. Data from the underwater unit is transmitted in real time to a shipboard data terminal through a 3-conductor electro-mechanical cable. The data is in TELETYPE (TTY) format and uses a frequency shift key (FSK) modulated signal superimposed on the DC power supplied to the underwater unit.

Both pre-cruise and post-cruise laboratory calibrations were done at Northwest Regional Calibration Center (NRCC) in Bellevue, Washington. The CTD was placed in a temperature controlled bath and compared against a calibration standard at nine different temperatures ranging from 0° to 30°C . A linear fit was calculated for the platinum thermometer. A calibrated piston gauge was used to determine separate third-order fits for the CTD pressure sensor at four temperatures for increasing pressure (over seven pressure values from 0 to 6300 db) and decreasing pressure (over six values from 6300 to 0 db). Temperature and pressure calibrations are crudely checked at sea by comparing values with those from deep reversing thermometers, but the stability of the sensors is good enough (about 4 milli-degrees C for temperature and about 0.95 db for pressure over the 4-month period between pre- and post-cruise calibrations) that the CTD sensors are more accurate than the reversing thermometers.

The conductivity sensor usually drifts significantly from pre-cruise calibrations with use and is most accurately calibrated using water sample salinities. Immediately prior to tripping the rosette, values of pressure, temperature, and conductivity were recorded from the CTD deck unit. These upcast CTD values are usually used for comparison with sample salinity values.

3. DATA ACQUISITION

PMEL's Neil Brown Mark IIIb CTD S/N 1111 (sampling rate 31 Hz) and two General Oceanics 24-bottle rosettes were used throughout the cruise. Casts to within a nominal distance of

50 m from the bottom were made using a Benthos acoustic pinger mounted low on the frame and opposite the CTD sensor arm. The position of the package relative to the bottom was monitored on the ship's Precision Depth Recorder (PDR). A bottom depth was provided by the ship's fathometer and the PDR turned on within 1000 m of the bottom during the downcast. Ten-liter Niskin bottles were used to collect water samples for salinity, oxygen, nutrients, CFCs, helium, tritium, radiocarbon, CO₂, pH, DON, DIC, and productivity.

The package entered the water and was lowered at a rate of 30 m/min for the first 50 m. To reduce the chance of contamination in the bottles, the package was not soaked near the surface prior to descent. Speed was increased at 50 m to 45 m/min, and increased again at 200 m to 60 m/min. Ship roll sometimes caused substantial variation about these mean lowering rates. After retrieval of the package, sensors were flushed with fresh water and a plastic cover was placed around the sensor arm and filled with fresh water.

A Neil Brown Mark III deck unit received the FSK signal from the CTD and displayed pressure, temperature, and conductivity. An analog signal was forwarded from the deck unit to an XYY' recorder to monitor the data acquisition in real time for signal spiking and problems with the electrical termination. An audio signal was sent to an Akai reel-to-reel audio recorder as a backup. Digitized data were forwarded to a 286-AT personal computer with EG&G Oceansoft acquisition software version 2.02 and backed up onto ¼" cartridge tape. Data files were transferred to a microVAX II where PMEL's standard processing and plotting software were installed. Plots were generated after each cast to check for problems and monitor sensor drift. Backups of the raw and processed data were made using TK50 cartridge tapes.

3.1 Data Acquisition Problems

Beginning with cast 1, there were several nonconfirmations from the rosette deck unit. After the second cast, the CTD was reterminated and a grounding strap added. An oscilloscope monitored the voltage sent down the cable. There was some signal noise in the conductivity channel seen on the XYY' plots. CTD connectors were cleaned and checked as well as the conductivity cell prior to cast 17. After this, the XYY' plots looked good and the rosette functioned well. During cast 28, the CTD grounding strap parted and was fixed after the cast. Heavy surging produced two kinks in the cable during cast 32 and cast 33. Cast 36 produced two bends in the cable within 3 m of the underwater package but the cable was not reterminated. With cast 40 began major malfunctions in the rosette system including nonconfirmations on the deck unit and open bottles at the surface but not necessarily the same number. Water was found in the connectors after this cast and they were cleaned and reseated. Extensive troubleshooting of the rosette system continued with nearly every cast. After cast 55, the CTD and rosette signals were separated and placed on independent conducting wires in the sea cable. Things did not improve, however. The CTD was reterminated after cast 56. The grounding strap parted again during cast 59 and was repaired. The conductivity sensor was flushed with deionized water because of a noisier analog signal. By cast 72 the rosette

was working better though not perfectly. After cast 77, all operations ceased for 2 days owing to bad weather. The remaining casts were in rougher seas, the last being cast 87 at station 66.

Misfires were determined by a collaborative effort using the difference between CTD and bottle salinity, pH, oxygen, and nutrient data.

Audio tapes for the Akai reel-to-reel recorder had been recycled several times and backups were poor owing to oxidation of the tapes despite repeated cleaning of the tape heads even during the cast. The recorder began failing around station 22. Approximately 600 m of data from cast 65 were lost during acquisition when the PC hard disk became full and the program aborted. The operator didn't realize this for several minutes and the data had to be restored from audio reel-to-reel tape later. The replay was very poor. The majority of data between 1350 and 2100 m is linearly interpolated in patches. Audio backups were made using cassette tapes for casts 56–59, and after cast 65.

3.2 Salinity Analyses

Bottle salinity analyses were performed in a climate-controlled lab using two Guildline Autosal Model 8400A inductive salinometers and IAPSO Standard Seawater from Wormley batch P110. The commonly accepted precision of the Autosal is 0.001 psu, with an accuracy of 0.003 psu. Salinity samples were collected from each sample bottle at all stations by ship's personnel. Two samples were drawn from the deepest bottle at each station to monitor the drift of the Autosal instrument. The first deep sample was run that day, the second was run the following day. The Autosals were standardized at the beginning of each day using one vial of standard seawater, and again at the end of each case of sample bottles. The drift during each run was monitored and individual samples were corrected for the drift during each run by linear interpolation. Bottle salinities were compared with computed CTD salinities to identify leaking bottles, as well as to monitor the conductivity sensor performance and drift. Calibrated CTD salinities replace missing bottle salinities in the hydrographic data listing and are indicated by an asterisk. Bad bottle values have not been flagged in this report.

4. POST-CRUISE CALIBRATIONS

NRCC pre-cruise calibrations for CTD S/N 1111 were as follows:

E	D	C	B	P	DN	FEB 91
-32.7088	0.9961159	0.188702E-5	-0.1999822E-09	P	DN	FEB 91
-35.0322	0.9940687	0.293848E-5	-0.3073184E-09	P	UP	FEB 91
0.0534	1.0005530	0.000000E-6	0.0000000E-10	T	68	FEB 91
0.0018	0.9997682	0.000000E-6	0.0000000E-10	C		FEB 91

NRCC post-cruise calibrations for CTD S/N 1111 were as follows:

E	D	C	B	P	DN	JUN 91
-33.6641	0.9963757	0.181537E-5	-0.1971429E-09			
-35.8913	0.9941153	0.290680E-5	-0.3061199E-09	P	UP	JUN 91
0.0494	1.0006070	0.000000E-6	0.0000000E-10	T	68	JUN 91
-0.0028	0.9996766	0.000000E-6	0.0000000E-10	C		JUN 91

4.1 Pressure

Uptrace and downtrace scaling coefficients used were pre-cruise pressure calibrations applied as follows:

$$P = E + D * P_{RAW} + C * P_{RAW}^2 + B * P_{RAW}^3$$

where

	E	D	C	B
P(DOWN):	-32.7088	0.9961159	0.188702E-5	-0.1999822E-09
P(UP) :	-35.0322	0.9940687	0.293848E-5	-0.3073184E-09

4.2 Temperature

Final temperature calibrations used were pre-cruise coefficients applied as follows:

$$T = E + D * T_{RAW}$$

where E = 0.0534 and D = 1.0005530.

4.3 Conductivity

Final calibrations were computed for a composite bottle data set called COMBINE.CAL produced by program COMBINE of leg 1 casts 1–23, leg 2 casts 24–87, and Pacific Sulfur/Stratus Investigation cruise (PSI91) casts 88–116. PSI91 immediately followed the WOCE P16N legs using the same CTD equipment and procedures. The PSI data had no deep bottle data and so was calibrated along with the last group which included the whole of leg 2 data. Program LINCALW was used to compute an overall linear least-squares fit of CTD and bottle conductivity. Plotting command file CALMCONW.PPC generated a plot of cast number versus CTD-bottle conductivity differences which illustrated cast breaks between casts 2 and 3 where the cable was first reterminated, and between casts 16 and 17 where the conductivity cell had been cleaned on leg 1.

LINCALW was then run on all bottles in each of the three groups of casts. A CALMCONW plot of pressure versus CTD-bottle conductivity differences looked good but showed an offset of approximately 0.002 mmho/cm in the deepest bottles. Fitting each group using only deep bottles (>2000 m) remedied the deep pressure offset but skewed the surface bottles. The results of LINCALW applied were for all bottles in each group:

	BIAS	SLOPE	STD DEV	NPTS
Group 1 (casts 1 & 2):	-0.03930474	1.000857	0.0014	34
Group 2 (casts 3–16):	0.01242658	0.999319	0.0017	256
Group 3 (casts 17–118):	-0.00262318	0.999693	0.0022	1398

DEEPCTD.PPC plots of CTD salinity versus potential temperature and bottle salinities overplotted with the above calibrations applied showed that the majority of deep CTD traces were slightly fresher than the bottles. An average of the CTD-bottle conductivities for bottles deeper than 5000 m was computed (0.0015 mmho/cm), added to the bias correction of group 3, and applied to only casts of leg 2 (casts 24–87). Adding this additional conductivity offset to leg 1 casts of group 3 made no improvement.

CTD-bottle conductivity differences with final calibration coefficients applied are plotted against cast number to show the stability of the calibrated CTD conductivities relative to the bottle conductivities (figure 3 upper panel). CTD-bottle conductivity differences plotted against pressure show the tight fit below 1000 m and the increasing scatter above 1000 m (figure 3 lower panel).

4.3.1 Conductivity Calibration Programs and Plotting Command Files (.PPC)

COMBINE creates an uncalibrated bottle data file of CTD pressure, temperature, conductivity, and bottle salinity.

CALMSTRW inputs the uncalibrated bottle file and outputs a calibrated bottle file with computed CTD salinity. CALMSTRW also outputs a WOCE bottle file (.SEA) with unedited quality flags.

LINCALW inputs the uncalibrated bottle file (which may be broken into groups) and calculates a least-squares fit between CTD and water sample conductivity. When the difference between CTD and water sample conductivity is greater than 2.8 times the standard deviation of the calculated fit, the calibration pairs are discarded. Another fit is then calculated without these points and the process is iterated until no calibration pairs are discarded. LINCALW outputs a file containing the final least squares fit coefficients and a log file of fit iterations.

CALMCONW.PPC reads the calibrated bottle data and makes five separate scatter plots of pressure, temperature, conductivity, salinity, and cast number versus CTD-bottle conductivity. These are examined for cast breaks and drifts in the CTD, and show the stability of the final calibrated CTD conductivities relative to the bottle conductivities.

CALMDEEPW.PPC reads the calibrated bottle file and makes two separate scatter plots of CTD salinity and bottle salinity versus potential temperature from theta = 0.6 to 2.2 °C.

DEEPCTD.PPC reads processed CTD and bottle data files of deep casts and overplots discrete bottle salinity data on CTD salinity traces from theta = 0.8 to 2.4 °C.

5. POST-CRUISE PROCESSING

Standard processing programs and plotting command files were used to process this data set. TSPLTEP.PPC and DEEPCTD.PPC plots were used to identify any spiking or looping not corrected in the processing programs. These were removed using EPCTDW subroutine NOMIT and replaced by linear interpolation.

5.1 Processing Programs and Plotting Command Files

In order to eliminate anomalous excursions in the raw temperature and conductivity data associated with reversals in the direction of movement of the CTD package, as well as when the package decelerated due to the ship rolling and pitching, DPDNZ computes a fall rate between samples approximately 2 seconds apart and records it along with the original unprocessed data. DPDNZ inputs EG&G CTDACQ raw data files (.EDT) and outputs a binary file of raw data including computed fall rates (.DPZ) and an ASCII file (.RECZ) from which a record range for the downcast is selected.

DLAGAVZ inputs the binary file of raw data including fall rate values (.DPZ), applies pre-cruise calibrations, edits the data for window outliers and first differencing outliers, fills these gaps by linear interpolation, corrects for the time-constant mismatch between temperature and conductivity sensors, edits data exceeding the fall rate criteria, computes 1-m averages, and applies a cell correction to final conductivity values. DLAGAVZ outputs an error log file of outlier flags, interpolated values, and fall rate criteria failures; and an ASCII data file including computed salinity.

After reading in a buffer of data, DLAGAVZ applies appropriate transfer functions to convert the data to engineering units and checks for obviously bad values. If a value falls outside preset windows it is flagged as bad. The windows used on this data set were -12 to 6500 db for pressure, -2° to 33°C for temperature, and 24 to 68 mmho/cm for conductivity. The first two data scans after the user-supplied starting record number which pass this window test are considered the first two good scans. Subsequent data points are then edited by calculating the difference between the scan under consideration and the previous scan. If this difference is greater than a certain preset value (1 for pressure, 0.07 for temperature, and 0.1 for conductivity) it is tentatively rejected. The difference between the next scan and the last good scan is then calculated. If this value exceeds twice the maximum allowable difference between scans, it too is considered bad. If five scans in a row fail in this manner it is assumed that there is a gap in the data record and all scans are retained as good. If the next, third, fourth or fifth scan has a value close enough to the last good scan, then the scan in question is flagged as bad and is rejected.

A filter is applied to conductivity data in DLAGAVZ to account for the response time difference between the conductivity sensor and the slower platinum thermometer. This filter was developed using the techniques discussed in Horne and Toole (1980). Conductivity is slowed as follows:

$$C(n) = (1 - A) CM(n) + A * C(n - 1)$$

where C is the lagged conductivity, CM is the measured conductivity, n is the scan number, and A is a constant which has been determined to best match temperature and conductivity (A = 0.87).

As the CTD/rosette package descends rapidly through the water column, turbulent wake is shed behind it. As the package slows suddenly or reverses due to ship's roll, the wake is shed forward. When the fall rate of the package increases again, the sensor measurements are affected by the mixed water it must pass through. In DLAGAVZ, the lagged conductivity and measured temperature values are accepted and placed in 1 db bins unless the fall rate calculated by DPDNZ falls below the user specified minimum rate (0.8 db/60 scans or 25 m per minute). Data are rejected until the CTD is once again moving downward past the pressure at which it slowed below the minimum fall rate plus a user-specified pressure interval (1.5 db) to account for passing through the mixed water.

EPCTDW inputs calibrated pressure, temperature, and raw conductivity data, applies any additional pressure and temperature calibrations, and corrects raw conductivity for cell material deformation dependence on pressure and temperature as follows (Fofonoff *et al.*, 1974):

$$CC = CR * (1 - \alpha * (DATA(2,L) - 15.) + \beta * (DATA(1,L) / 3.))$$

where DATA (1,L) is pressure, DATA (2,L) is temperature, $\alpha = 6.5E - 06$ and $\beta = 1.5E - 08$. EPCTDW applies conductivity calibrations, computes salinity, eliminates single-point spikes according to the gradients given in the source code, omits any values specified by the processor, fills missing records by linear interpolation such that a value exists every whole meter, recomputes conductivity, and calculates potential temperature, sigma-t, sigma-theta, and dynamic height according to the subroutines supplied in Fofonoff and Millard (1983). EPCTDW outputs final data files (.CTD) in PMEL's EPIC (Equatorial Pacific Information Collection) format (Soreide *et al.*, 1995) and a log file listing the edited and filled data points.

In EPCTDW, a single-point spike in temperature or salinity is removed if the gradient is greater than 0.05° for temperature and 0.025 for salinity above 200 db, and 0.01 for temperature and salinity below 200 db; and has the opposite sign. Surface values of temperature and salinity are filled with the values associated with the shallowest pressure for which values do exist provided this pressure is less than 20 db. Data points are linearly interpolated to fill gaps, resulting in an even 1 db pressure spacing of the final data array.

EPICBOMSTRW inputs the calibrated bottle data file and EPIC CTD data files (for header information), and outputs bottle data files in EPIC format.

TSPLTEP.PPC reads a CTD EPIC pointer file and a bottle EPIC pointer file and overplots discrete bottle salinity data onto full water column CTD traces. TSPLTEP.PPC also overplots sigma-t lines.

TEXTNOX inputs a CTD EPIC pointer file and constructs a plotting subcommand file, TXT*.PPC, for each cast.

3PLTNOX.PPC reads TXT*.PPC subcommand files and a CTD EPIC pointer file and generates vertical profiles of temperature, salinity, and sigma-t versus pressure to 1000 db. 3PLTNOX.PPC also lists a subsampling of CTD data in table form aside the profiles.

6. DATA PRESENTATION

The final calibrated data in EPIC format were used to produce the plots and listings which follow. The majority of the plots were generated using Plot Plus Scientific Graphics System (Denbo, 1992). Tables 2–6 define the abbreviations and units used in the CTD data summary listings. Vertical sections of potential temperature and salinity are contoured with pressure as the vertical axis and latitude as the horizontal axis (Figs. 4–7). Nominal vertical exaggerations are 500:1 below 1000 db (lower panels) and 1250:1 above 1000 db (upper panels). Plots and summary listings of CTD data follow for each cast. All sample salinity values are given, including bad values, which are not flagged in this report. Hydrographic bottle data at discrete depths are listed in the final section.

7. PARTICIPATING INSTITUTIONS/PERSONNEL

NOAA Pacific Marine Environmental Laboratory (PMEL)
NOAA Atlantic Oceanographic and Meteorological Laboratory (AOML)
Woods Hole Oceanographic Institution (WHOI)
University of California Santa Barbara (UCSB)
Scripps Institution of Oceanography (SIO)
University of South Florida (USF)
University of Washington (UW)
Princeton University
Oregon State University (OSU)
University of Miami (UM)

Measurement	Principal Investigator	Institution
CTD	S. Hayes	PMEL
CFCs	J. Bullister	PMEL
Helium-3	W. Jenkins	WHOI
Tritium	J. Lupton	UCSB
Oxygen	W. Jenkins	WHOI
Total CO ₂	J. Swift	SIO
Alkalinity	R. Feely	PMEL
pH	R. Feely	PMEL
DIC	R. Byrne	USF
C14 (Large Volume)	P. Quay	UW
C14 (AMS)	R. Key	Princeton
Nutrients	R. Key	Princeton
DON	J. Swift	SIO
ADCP	P. Wheeler	OSU
	R. Pinkel	SIO

		Leg 1	Leg 2
John Bullister, PMEL	Chief Scientist/CFCs		X
David Wisegarver, PMEL	CFCs	X	X
Fred Menzia, PMEL	CFCs	X	X
Jeff Benson, PMEL	rosette operations	X	X
Margie McCarty, PMEL	CTD	X	
Kristy McTaggart, PMEL	CTD		X
Tiffany Vance, PMEL	CTD		X
Dana Greeley, PMEL	rosette operations, CO ₂	X	X
Paulette Murphy, PMEL	CO ₂	X	X
Susan Leftwich, AOML	CO ₂		X
Jianrong Zhang, UW	DIC		X
Richard Kovar, OSU	Productivity/DON	X	
Mary-Lynn Dickson, OSU	Productivity/DON	X	X
Pat Wheeler, OSU	Productivity/DON		X
Mike Behrenfeld, OSU	Productivity		X
Robert Key, Princeton	LV C-14, AMS C-14	X	X
Art Hester, SIO-ODF	Oxygen, nutrients	X	X
Leonard Lopez, SIO-ODF	Large volume C-14	X	X
Robert Byrne, USF	pH		X
Tonya Clayton, USF	pH		X
Kim Kelly, PMEL	Underway dissolved gases	X	X
Kelly Roupe, PMEL	Helium-tritium	X	X
Dan Lee, PMEL	CFCs, data processing	X	X
Timothy Bates, PMEL	Trace gases	X	
Patricia Quinn, PMEL	Trace gases	X	
David Cooper, UM	Trace gases	X	
Sheri Yvon, UM	Trace gases	X	

8. ACKNOWLEDGMENTS

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9. REFERENCES

- Denbo, D.W. (1992): PPLUS Graphics, P.O. Box 4, Sequim, WA, 98382.
- Horne, E.P.W. and J.M. Toole (1980): Sensor response mismatch and lag correction techniques for temperature-salinity profilers. *J. Phys. Oceanogr.*, 10, 1112–1130.
- Fofonoff, N.P., and R.C. Millard (1983): Algorithms for computation of fundamental properties of sea water. UNESCO Report No. 44, 15–24.

- Fofonoff, N.P., S.P. Hayes and R.C. Millard (1974): *Woods Hole Oceanographic Institution Technical Report No. 74-89*, 64 pp.
- Soreide, N.N., M.L. Schall, W.H. Zhu, D.W. Denbo and D.C. McClurg (1995): EPIC: An Oceanographic Data Management, Display and Analysis System. Proceedings of the Eleventh International Conference on Interactive Processing Systems for Meteorology, Oceanography, and Hydrology, January 15–20, 1995, Dallas, TX, 316–321.

FIGURES AND TABLES

CG1-91-DI CRUISE TRACK
February 14 – March 1, 1991
Seattle – Hilo, HI

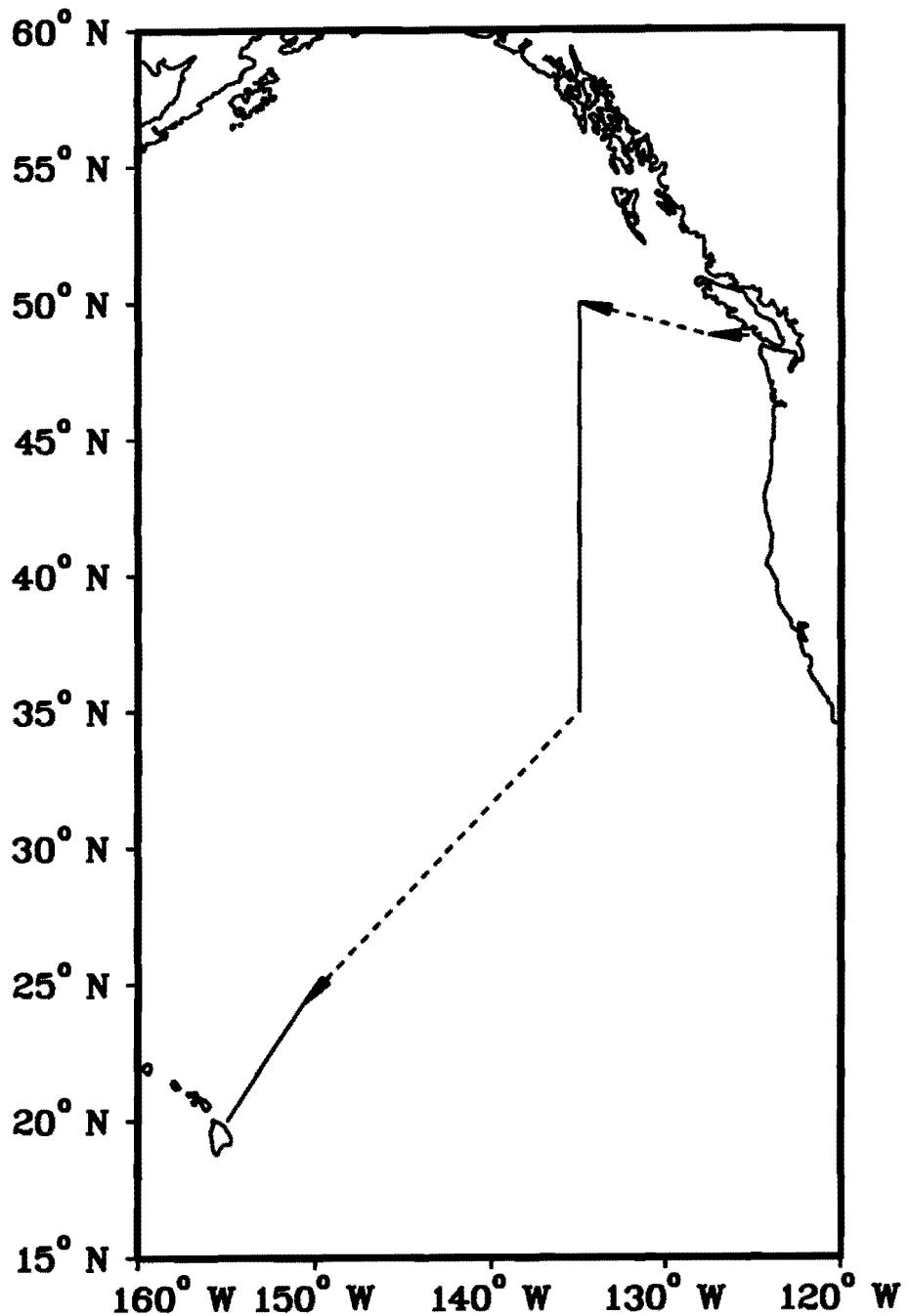


Fig. 1a. CGC91 cruise track, leg 1.

CG1-91-DI CTD STATIONS
February 14 – March 1, 1991
Seattle – Hilo, HI

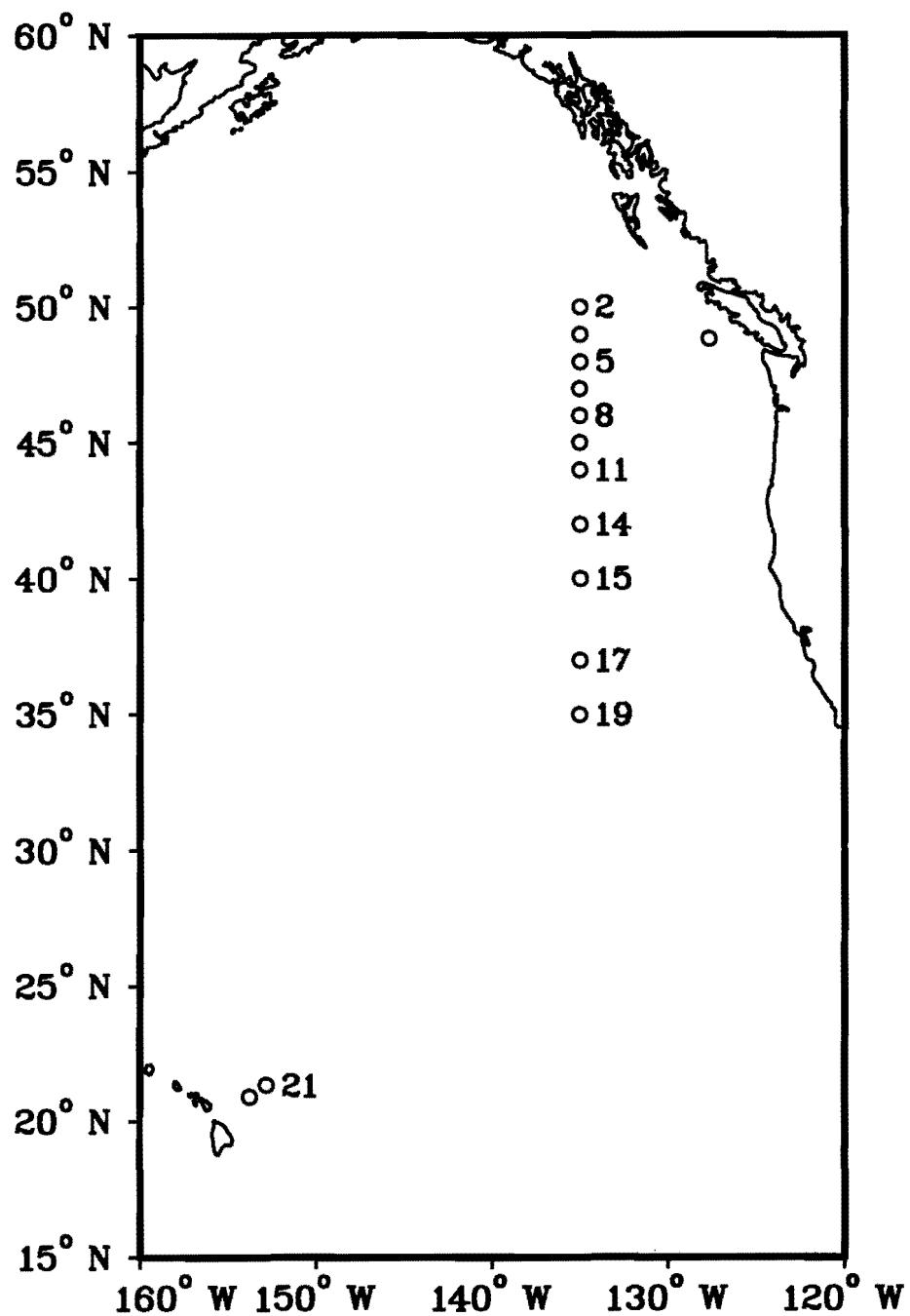


Fig. 1b. CTD station locations made on the NOAA ship *Discoverer* from 16 February to 1 March, 1991.

CG2-91-DI CRUISE TRACK
March 7 – April 7, 1991
Hilo, HI – Seattle

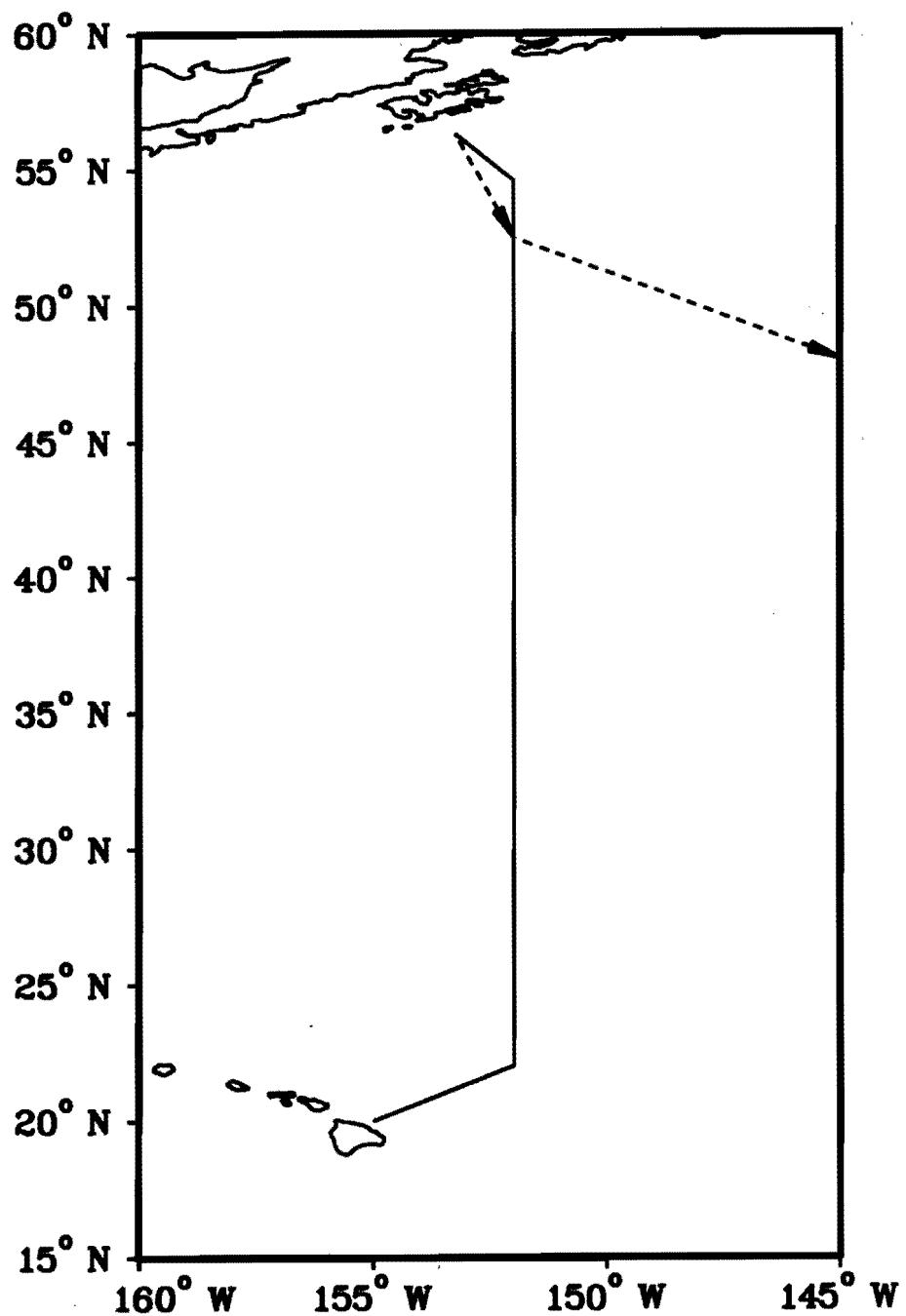


Fig. 2a. CGC91 cruise track, leg 2.

CG2-91-DI CTD STATIONS
March 7 – April 7, 1991
Hilo, HI – Seattle

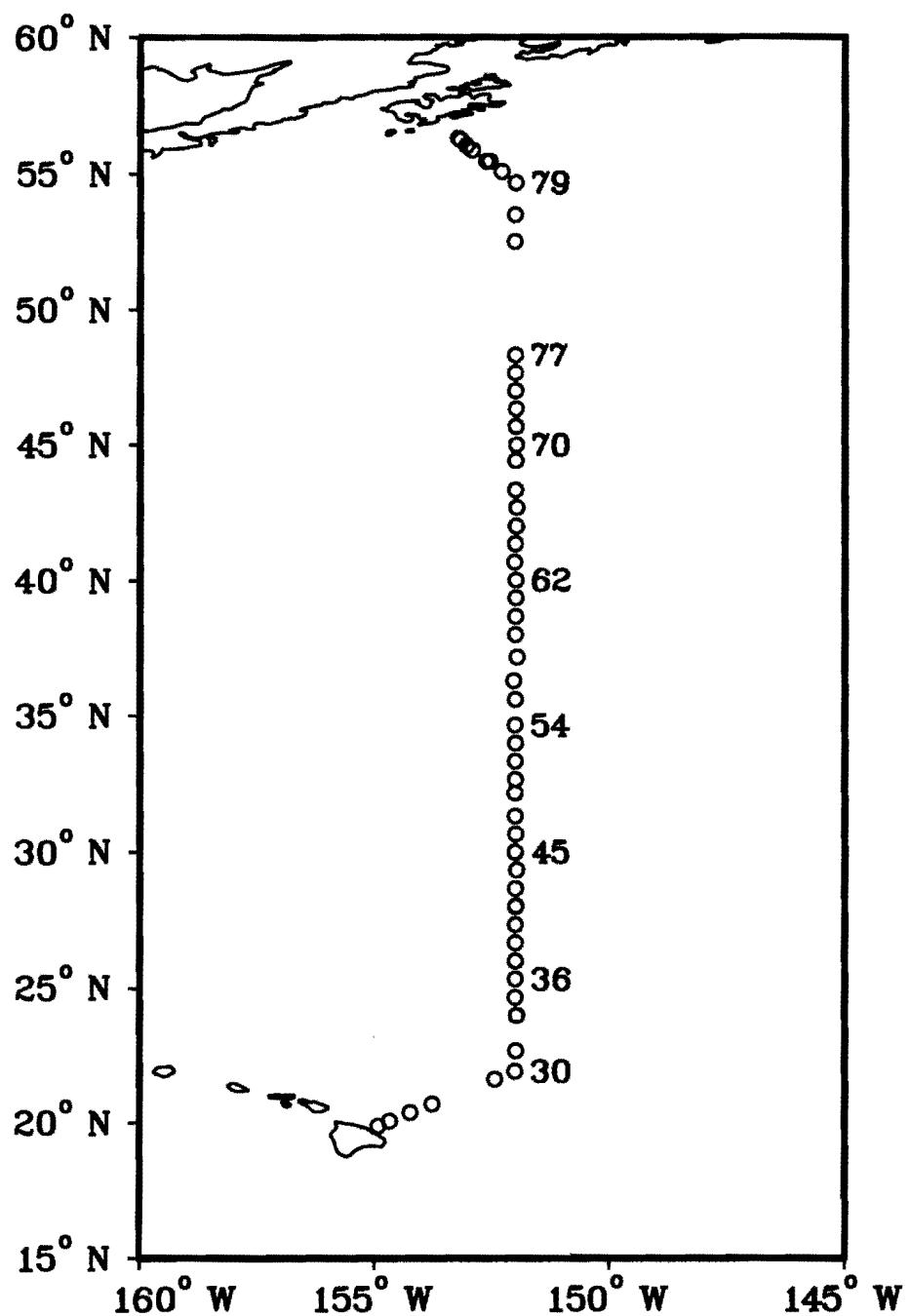


Fig. 2b. CTD station locations made on the NOAA ship *Discoverer* from 8 March to 2 April, 1991.

Table 1. CTD cast summary.

Stn #	Cast #	Latitude	Longitude	Date	Time	W/D T	W/S (kts)	Depth (m)	Cast (db)
1	1	48 50.0N	127 39.7W	16 FEB 91	536	240	6	2529	2379
2	2	50 0.2N	135 0.0W	17 FEB 91	836	165	5	3480	300
2	3	50 0.2N	134 59.8W	17 FEB 91	1219	172	13	3480	3505
3	4	48 59.7N	134 59.5W	17 FEB 91	2322	180	14	3921	3498
4	5	47 59.5N	134 58.7W	18 FEB 91	922	212	17	3742	3773
4	6	47 59.5N	134 59.4W	18 FEB 91	1354	200	26	3652	298
5	7	46 59.2N	134 59.8W	19 FEB 91	9	225	30	4092	3502
6	8	46 0.2N	135 1.1W	20 FEB 91	234	275	22	3949	3951
6	9	46 0.0N	134 59.9W	20 FEB 91	720	260	16	3803	965
7	10	45 0.3N	135 0.2W	20 FEB 91	1636	0	3	4017	4041
8	11	43 59.9N	135 0.2W	21 FEB 91	1614	200	6	3944	301
8	12	43 59.5N	134 59.4W	21 FEB 91	1945	200	8	3944	3976
9	13	41 59.9N	134 59.5W	22 FEB 91	711	80	6	4023	301
9	14	42 0.3N	134 59.7W	22 FEB 91	1053	0	2	4025	4069
10	15	40 0.0N	135 0.0W	22 FEB 91	2205	125	17	4138	701
10	16	39 59.8N	134 59.9W	23 FEB 91	145	135	10	4144	4150
11	17	36 59.5N	134 59.4W	23 FEB 91	1700	95	16	5039	304
11	18	36 59.4N	134 59.4W	23 FEB 91	2038	95	16	5044	5134
12	19	35 0.1N	135 0.1W	24 FEB 91	740	90	15	5213	699
12	20	35 0.1N	135 0.1W	24 FEB 91	1151	115	5	5203	5270
13	21	21 20.0N	152 49.6W	28 FEB 91	2010	300	20	5255	356
13	22	21 20.1N	152 50.6W	28 FEB 91	2333	310	14	5249	5329
14	23	20 55.1N	153 47.5W	1 MAR 91	915	260	8	5235	1994
15	24	19 53.3N	154 55.3W	8 MAR 91	402	40	14	962	921
16	25	20 4.0N	154 40.5W	8 MAR 91	831	40	17	2531	2519
17	26	20 22.0N	154 14.1W	8 MAR 91	1448	50	24	5369	1006
17	27	20 23.8N	154 14.2W	8 MAR 91	1948	45	20	5455	5215
18	28	20 42.4N	153 46.0W	9 MAR 91	411	80	30	5064	5075
19	29	21 36.8N	152 26.2W	10 MAR 91	521	65	25	5339	5384
20	30	21 54.9N	152 0.2W	10 MAR 91	1310	75	23	5691	315
20	31	21 55.0N	152 0.0W	10 MAR 91	1647	75	22	5691	5753
21	32	22 40.6N	151 59.5W	11 MAR 91	1030	70	20	5576	5495
22	33	23 59.8N	151 58.8W	12 MAR 91	452	60	28	5617	5467
22	34	24 0.2N	151 58.0W	12 MAR 91	1000	70	22	5321	912
23	35	24 39.9N	152 0.2W	12 MAR 91	1824	65	23	5296	5346
24	36	25 20.2N	151 59.7W	13 MAR 91	910	60	28	5498	5542
25	37	26 0.1N	151 59.7W	13 MAR 91	1625	60	22	5372	603
25	38	26 0.2N	152 0.0W	13 MAR 91	2220	60	22	5373	5414
26	39	26 39.9N	152 0.0W	14 MAR 91	725	60	22	5428	5487
27	40	27 20.0N	151 59.9W	14 MAR 91	1602	70	20	5681	5556
28	41	28 1.4N	151 59.3W	15 MAR 91	100	60	22	5333	5530
28	42	28 0.0N	151 59.7W	15 MAR 91	855	60	25	5516	1007
29	43	28 39.8N	151 59.9W	15 MAR 91	1638	60	22	5602	5659
30	44	29 20.7N	151 58.3W	16 MAR 91	137	65	20	5267	5434
31	45	30 0.0N	152 0.0W	16 MAR 91	918	50	20	5397	300
31	46	30 0.0N	152 0.5W	16 MAR 91	1425	30	16	5400	5111
32	47	30 39.8N	151 59.5W	17 MAR 91	1030	45	17	5449	5420
33	48	31 20.1N	152 0.1W	17 MAR 91	1841	30	18	5465	5513
34	49	32 10.1N	152 0.3W	18 MAR 91	339	20	16	5262	5007
34	50	32 10.5N	152 0.6W	18 MAR 91	747	15	8	5256	401

Table 1. (continued)

Stn #	Cast #	Latitude	Longitude	Date	Time	W/D T	W/S (kts)	Depth (m)	Cast (db)
35	51	32 40.0N	152 0.0W	18 MAR 91	1336	0	10	5548	5608
36	52	33 20.0N	152 0.0W	18 MAR 91	2138	20	5	5563	5525
37	53	34 0.1N	152 0.1W	19 MAR 91	824	10	16	5559	5634
38	54	34 40.0N	152 0.3W	19 MAR 91	1631	20	8	5668	5734
39	55	35 36.5N	152 0.4W	20 MAR 91	224	0	4	5705	5759
40	56	36 17.8N	152 2.7W	20 MAR 91	1058	50	3	5629	5654
41	57	37 11.0N	151 58.0W	21 MAR 91	715	0	6	5572	5622
41	58	37 9.9N	151 57.6W	21 MAR 91	1129	0	4	5511	403
42	59	37 59.9N	152 0.0W	21 MAR 91	1904	130	8	4973	5021
43	60	38 40.2N	151 59.9W	22 MAR 91	215	120	1	5338	5350
44	61	39 21.0N	151 59.2W	22 MAR 91	933	0	0	5346	5510
45	62	40 0.9N	151 59.6W	22 MAR 91	1709	35	17	5253	5284
46	63	40 40.5N	152 1.3W	23 MAR 91	38	30	10	5021	5072
47	64	41 21.0N	152 0.3W	23 MAR 91	801	15	15	5218	5280
48	65	41 59.9N	151 59.2W	23 MAR 91	1556	60	16	5117	5139
48	66	41 59.6N	151 59.1W	24 MAR 91	931	105	18	5139	754
49	67	42 40.8N	151 58.5W	24 MAR 91	1628	105	20	5233	5211
50	68	43 20.0N	152 0.0W	24 MAR 91	2358	135	15	4932	5042
51	69	44 25.1N	151 59.8W	25 MAR 91	950	140	19	5201	5257
52	70	45 0.1N	151 59.0W	25 MAR 91	1736	145	17	5222	5341
53	71	45 41.0N	151 59.7W	26 MAR 91	113	140	18	5271	5336
53	72	45 41.1N	151 59.6W	26 MAR 91	405	40	18	5250	648
54	73	46 20.2N	151 59.3W	26 MAR 91	1006	145	22	5402	5458
55	74	47 0.3N	151 59.9W	26 MAR 91	1621	155	24	5167	405
55	75	47 0.0N	152 0.0W	27 MAR 91	739	270	15	5167	5234
56	76	47 39.9N	152 0.4W	27 MAR 91	1545	255	17	5116	5150
57	77	48 19.5N	152 0.3W	27 MAR 91	2320	210	25	5043	5114
58	78	53 29.7N	152 0.7W	30 MAR 91	137	270	15	4704	4755
59	79	54 39.8N	151 59.8W	30 MAR 91	1117	295	22	4291	4346
60	80	55 26.7N	152 37.7W	31 MAR 91	757	50	4	5158	5246
60	81	55 27.3N	152 33.5W	31 MAR 91	1143	120	5	5159	406
61	82	55 51.9N	152 55.7W	31 MAR 91	1715	135	10	4051	4078
62	83	56 1.6N	153 2.7W	31 MAR 91	2122	140	28	1977	1945
63	84	56 14.5N	153 10.8W	1 APR 91	100	105	24	964	935
64	85	56 17.7N	153 13.9W	1 APR 91	400	0	0	272	222
65	86	55 4.2N	152 17.9W	1 APR 91	2021	45	16	4157	4174
66	87	52 30.0N	152 1.2W	2 APR 91	2205	140	26	4403	4516

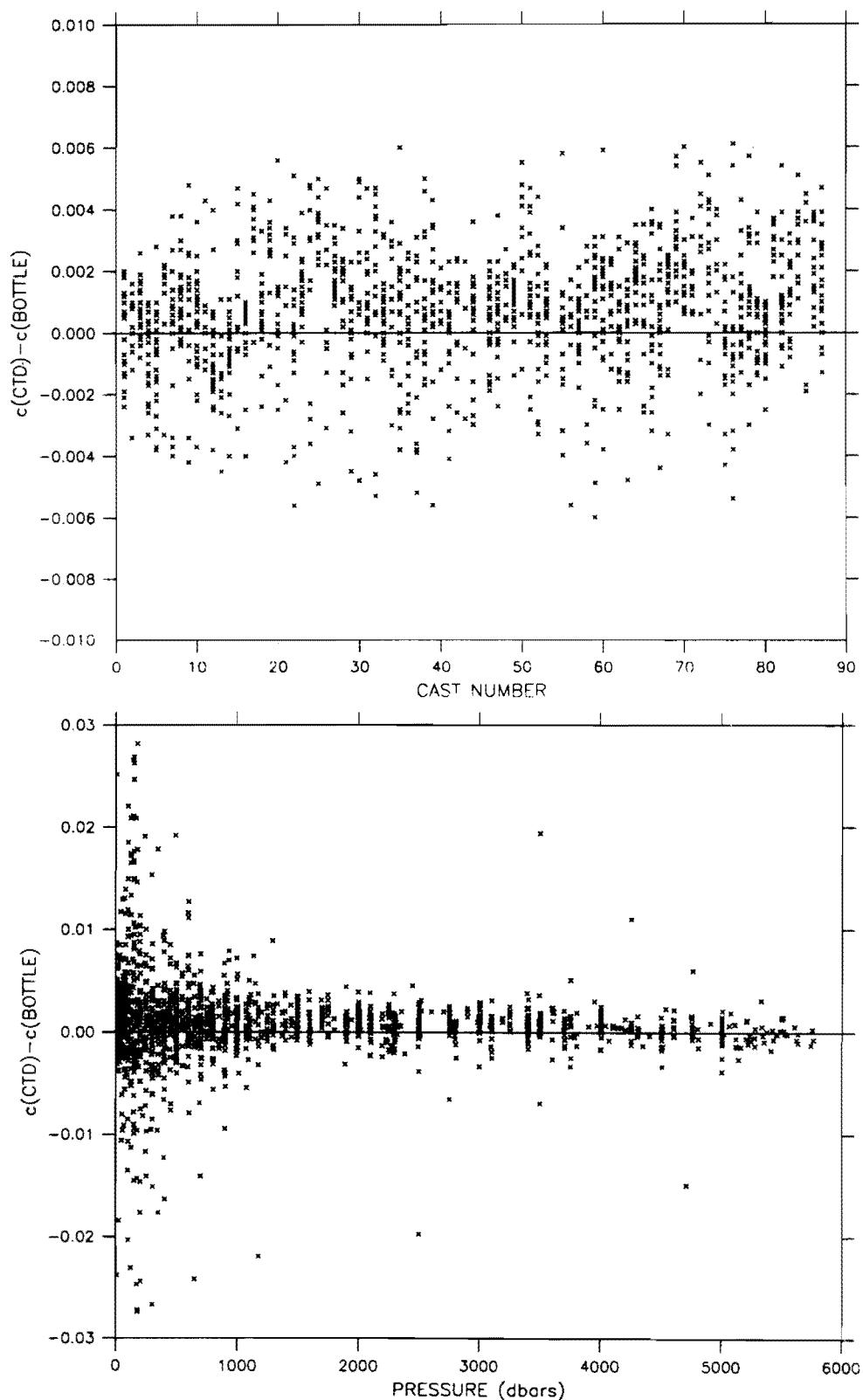


Fig. 3. Calibrated CTD-bottle conductivity (mmho/cm) differences plotted against cast number (upper panel). Calibrated CTD-bottle conductivity (mmho/cm) differences plotted against pressure (lower panel).

135°W POTENTIAL TEMPERATURE (C)
February 17 – 24, 1991

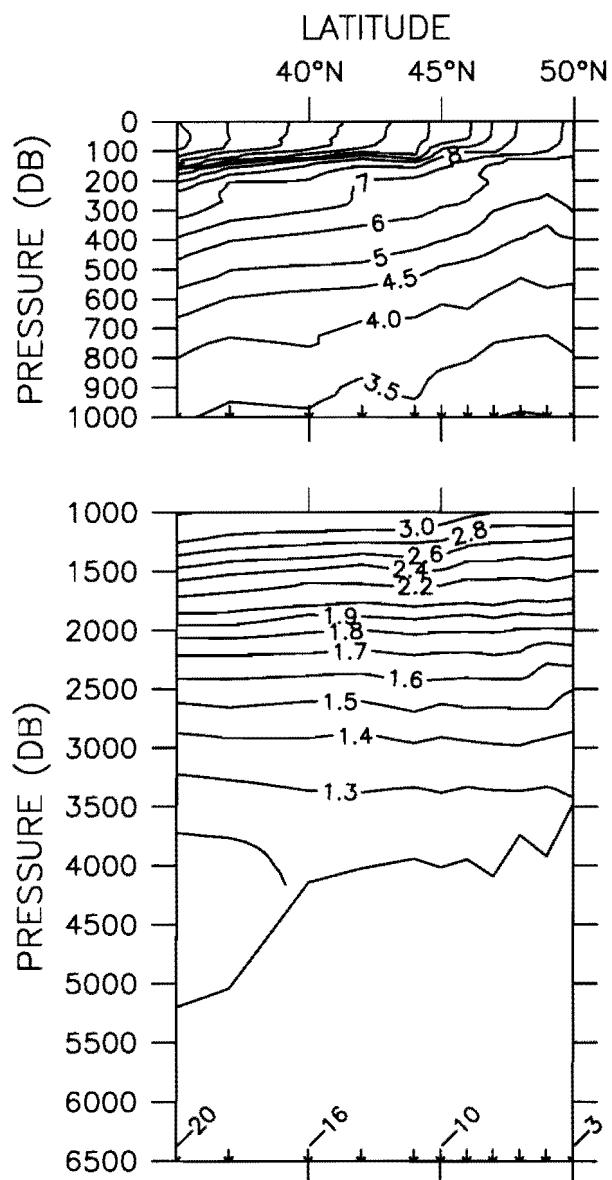


Fig. 4. Potential temperature (°C) section along 135°W. Contour intervals are 0.2°C from 0–3°C, 0.5°C from 3–5°C, and 1°C from 5–35°C in the upper panel. Contour intervals are 0.1°C from 0–2°C, 0.2°C from 2–3°C, 0.5°C from 3–5°C in the lower panel.

135°W SALINITY (PSU)
February 17 – 24, 1991

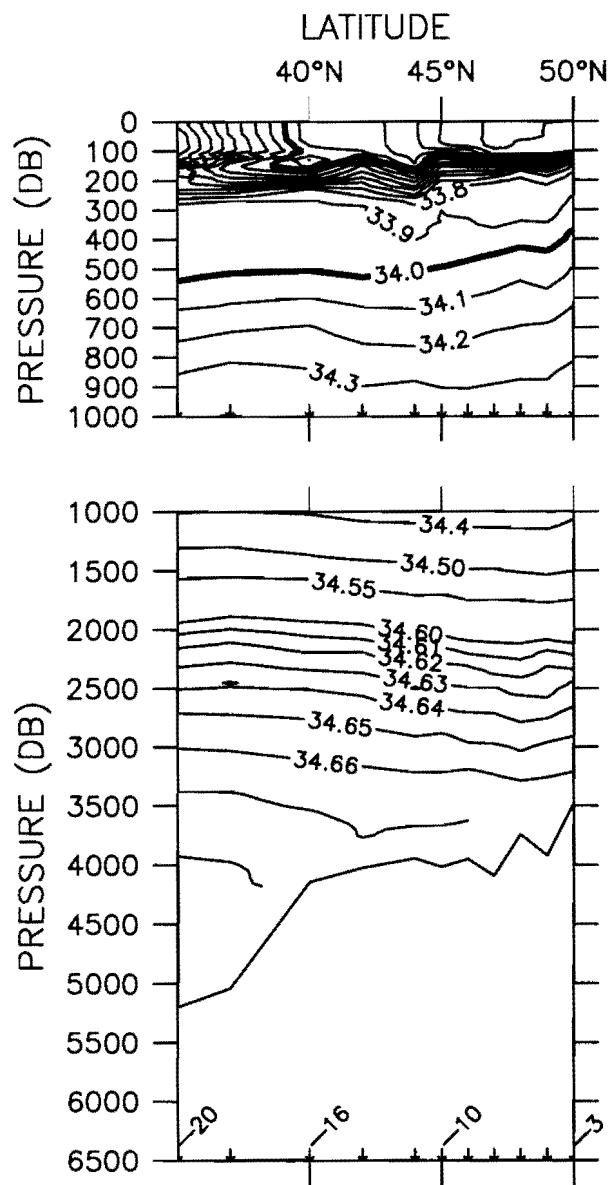


Fig. 5. Salinity (psu) section along 135°W. Contour intervals are 0.1 psu from 34.0–34.5 psu, 0.05 psu from 34.5–34.6 psu, and 0.1 psu from 34.6–37.0 psu in the upper panel. Contour intervals are 0.1 psu from 34.0–34.5 psu, 0.05 psu from 34.5–34.6 psu, and 0.01 psu from 34.6–34.8 psu in the lower panel.

152°W POTENTIAL TEMPERATURE (C)
 March 8 – April 2, 1991

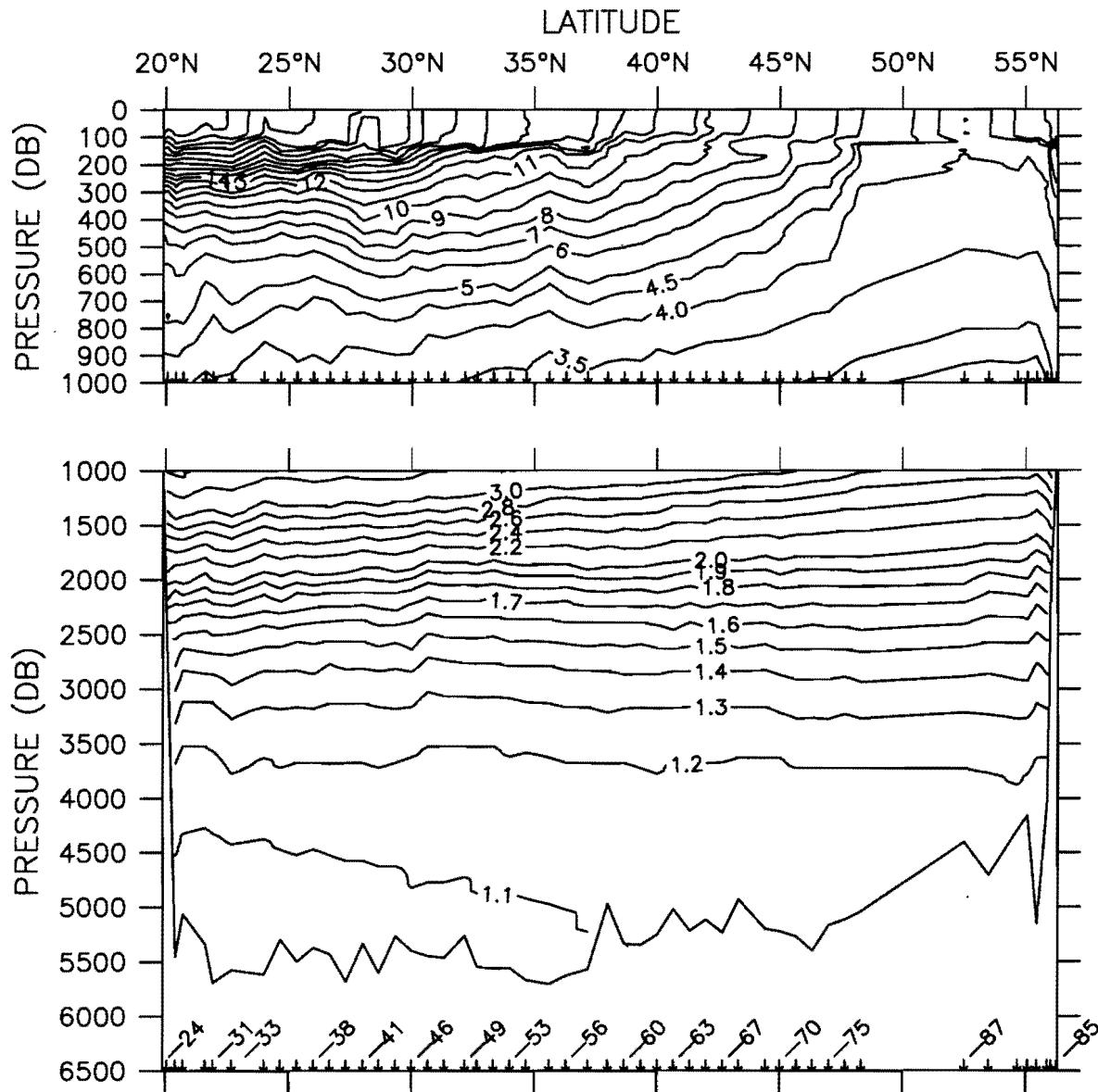


Fig. 6. Potential temperature (°C) section along 152°W. Contour intervals are 0.2°C from 0–3°C, 0.5°C from 3–5°C, and 1°C from 5–35°C in the upper panel. Contour intervals are 0.1°C from 0–2°C, 0.2°C from 2–3°C, 0.5°C from 3–5°C in the lower panel.

152°W SALINITY (PSU)
 March 8 – April 2, 1991

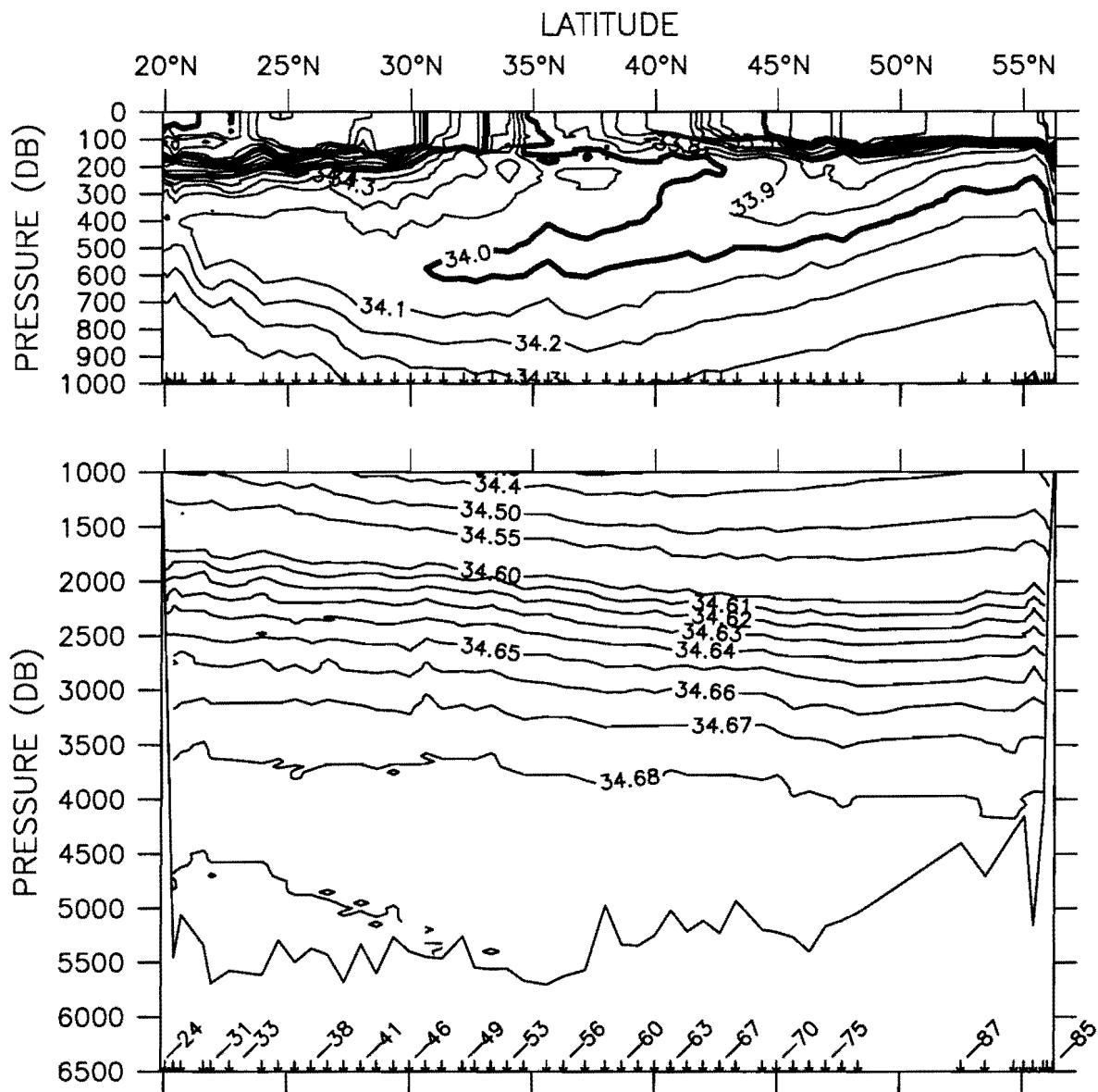


Fig. 7. Salinity (psu) section along 152°W. Contour intervals are 0.1 psu from 34.0–34.5 psu, 0.05 psu from 34.5–34.6 psu, and 0.1 psu from 34.6–37.0 psu in the upper panel. Contour intervals are 0.1 psu from 34.0–34.5 psu, 0.05 psu from 34.5–34.6 psu, and 0.01 psu from 34.6–34.8 psu in the lower panel.

TABLE 2. Weather condition code used to describe each set of CTD measurements.

Code	Weather Condition
0	Clear (no cloud)
1	Partly cloudy
2	Continuous layer(s) of cloud(s)
3	Sandstorm, dust storm, or blowing snow
4	Fog, thick dust or haze
5	Drizzle
6	Rain
7	Snow, or rain and snow mixed
8	Shower(s)
9	Thunderstorms

TABLE 3. Sea state code used to describe each set of CTD measurements.

Code	Height (meters)	Description
0	0	Calm-glassy
1	0–0.1	Calm-rippled
2	0.1–0.5	Smooth-wavelet
3	0.5–1.25	Slight
4	1.25–2.5	Moderate
5	2.5–4	Rough
6	4–6	Very rough
7	6–9	High
8	9–14	Very high
9	>14	Phenomenal

TABLE 4. Visibility code used to describe each set of CTD measurements.

Code	Visibility
0	<50 meters
1	50–200 meters
2	200–500 meters
3	500–1,000 meters
4	1–2 km
5	2–4 km
6	4–10 km
7	10–20 km
8	20–50 km
9	50 km or more

TABLE 5. Cloud type.

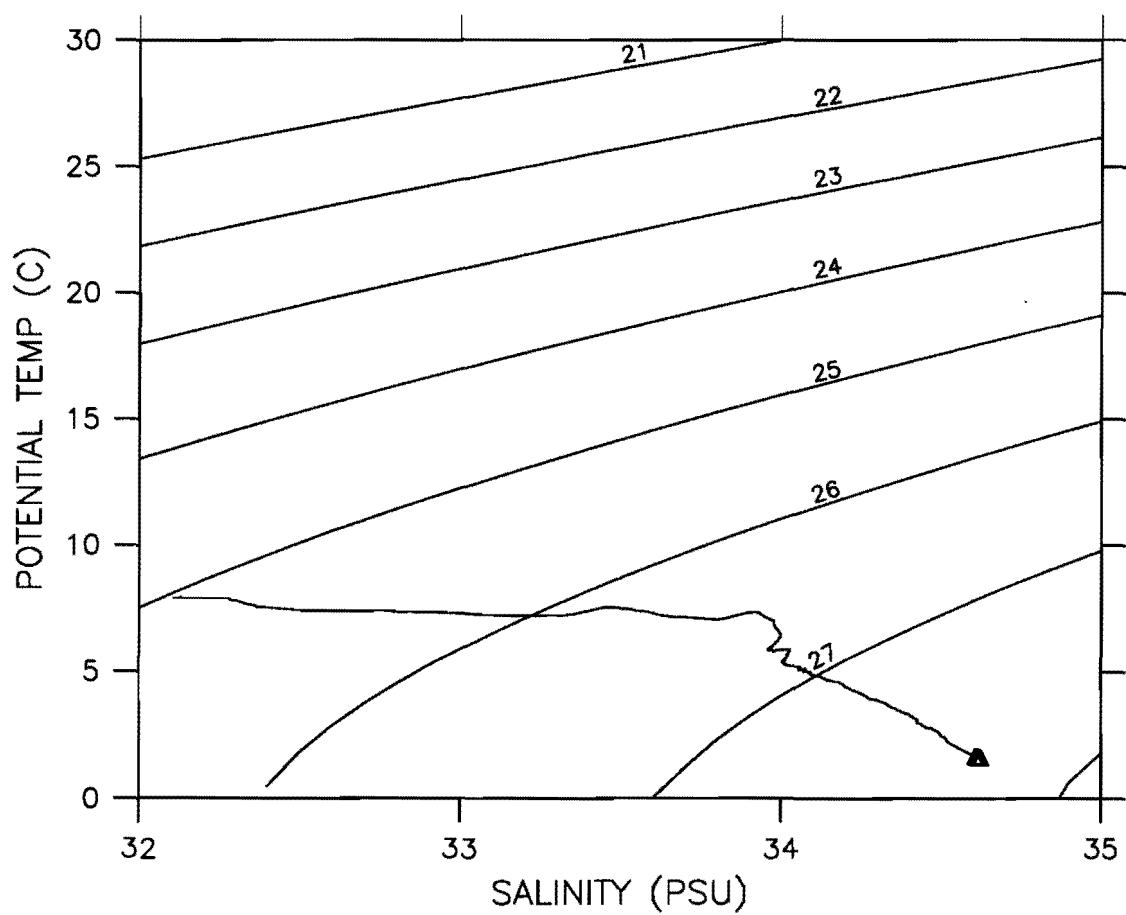
Code	Cloud Types
0	Cirrus
1	Cirrocumulus
2	Cirrostratus
3	Altocumulus
4	Altostratus
5	Nimbostratus
6	Stratocumulus
7	Stratus
8	Cumulus
9	Cumulonimbus
X	Clouds not visible

TABLE 6. Cloud amount.

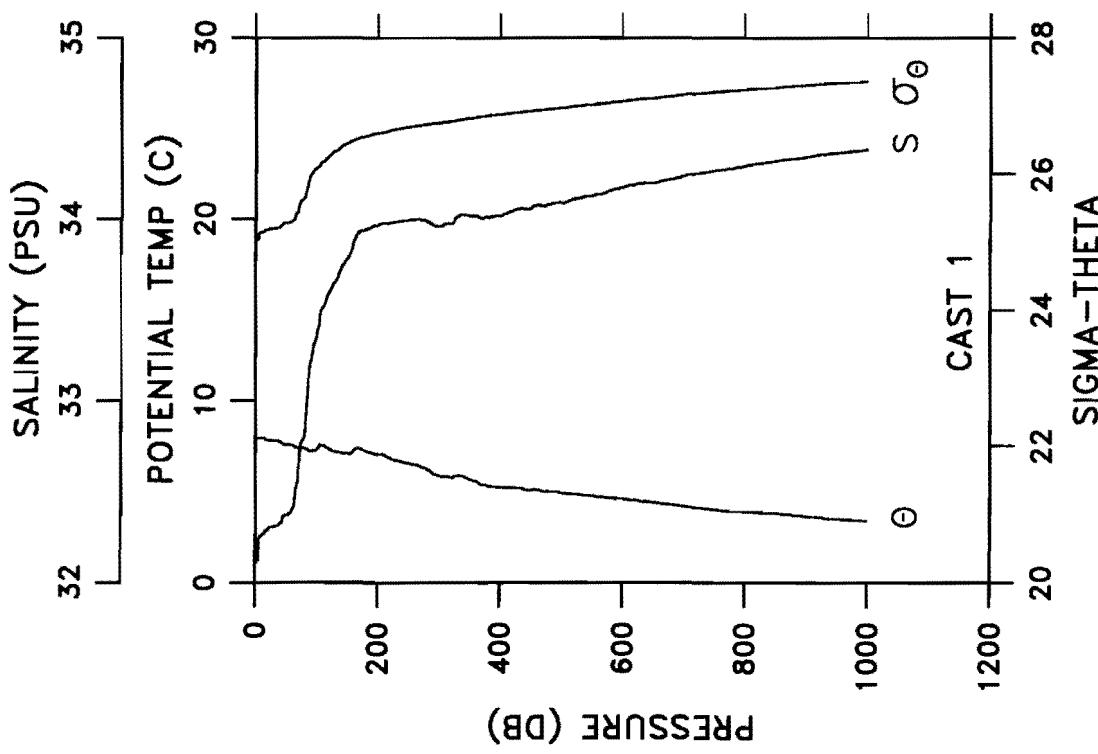
Code	Cloud Amount
0	0
1	1/10 or less but not zero
2	2/10-3/10
3	4/10
4	5/10
5	6/10
6	7/10-8/10
7	9/10
8	10/10
9	Sky obscured or not determined

CTD DATA SUMMARY

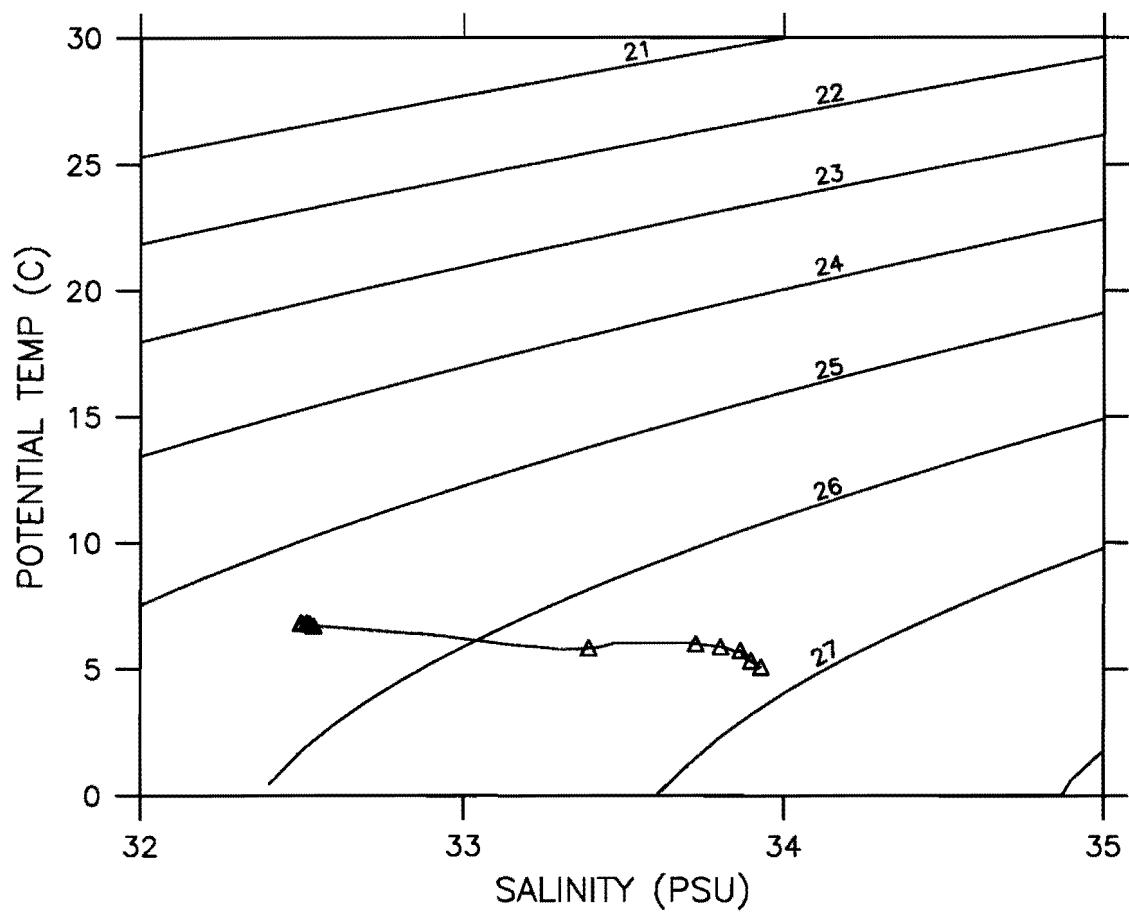
CAST CG1-91-DI -001 DATE 16 FEB 91 TIME 0536 GMT
LAT 48 50.0N LONG 127 39.7W



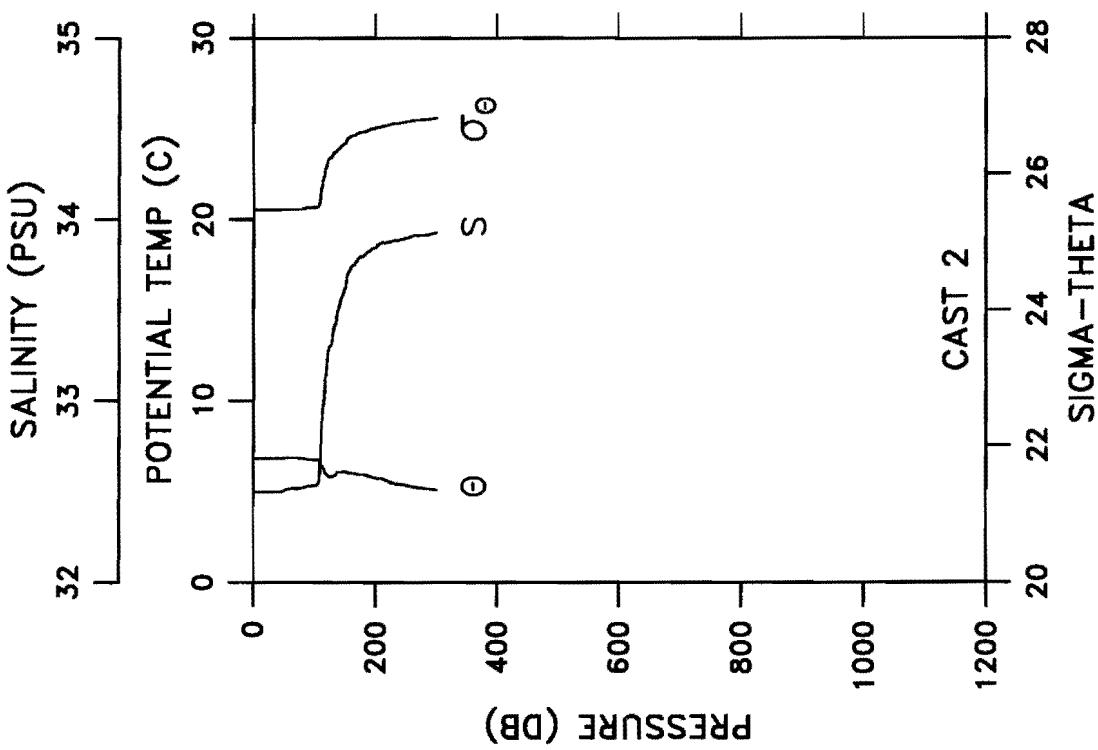
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 LAT 48 50.0N LONG 127 39.7W WEATHER 1 SEA STATE 2
 BAROMETER 15 WIND DIR 240 T SPD 06 KT VISIBILITY 7
 CLOUD 0 AMOUNT 2 DRY 07.6 WET 06.8 DEPTH 2529 M



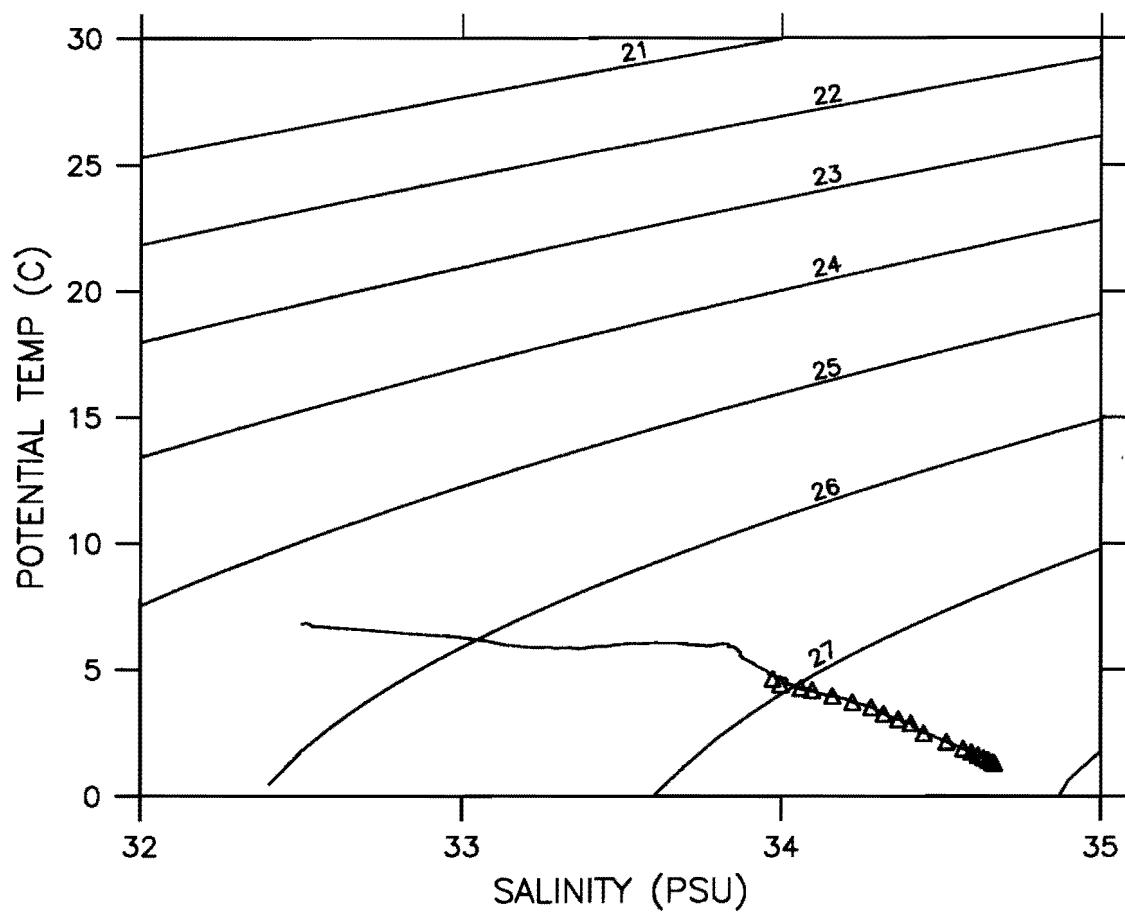
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LAT 50 00.2N LONG 135 00.0W



CAST CG1-91-DI -002 DATE 17 FEB 91 TIME 0836 GMT
 LAT 50 00.2N LONG 135 00.0W WEATHER 1 SEA STATE 3
 BAROMETER 17 WIND DIR 165 T SPD 05 KT VISIBILITY 8
 CLOUD 0 AMOUNT 9 DRY 06.4 WET 04.8 DEPTH 3480 M

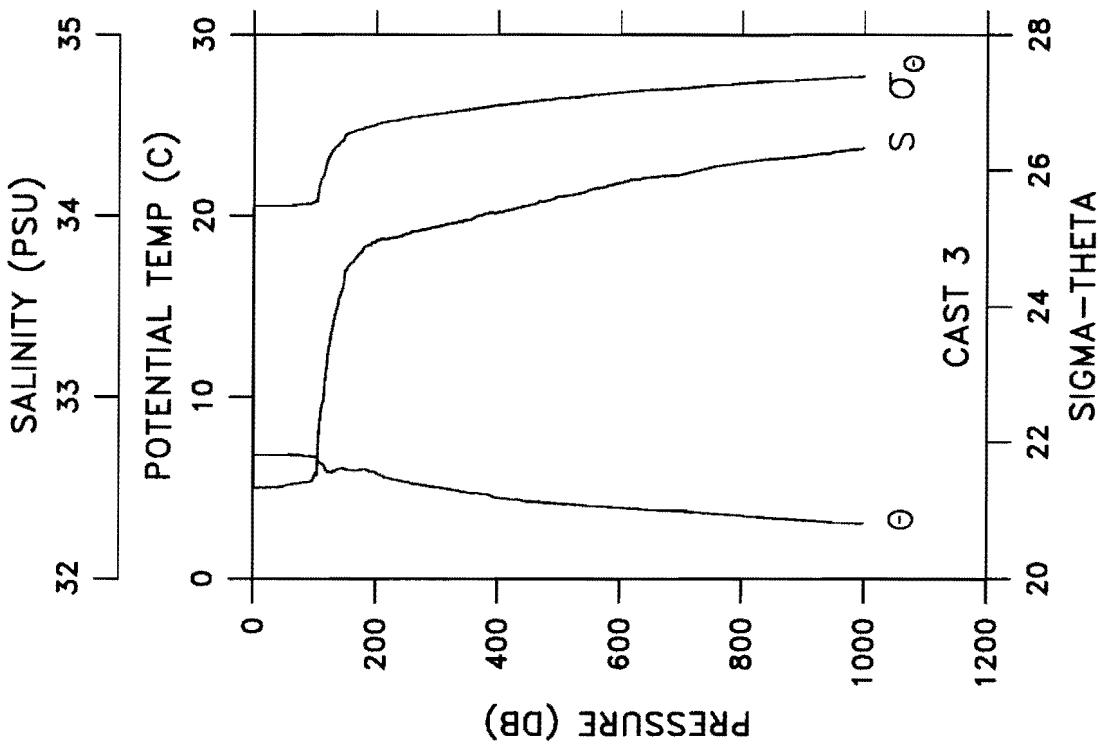


CAST CG1-91-DI -003 DATE 17 FEB 91 TIME 1219 GMT
LAT 50 00.2N LONG 134 59.8W

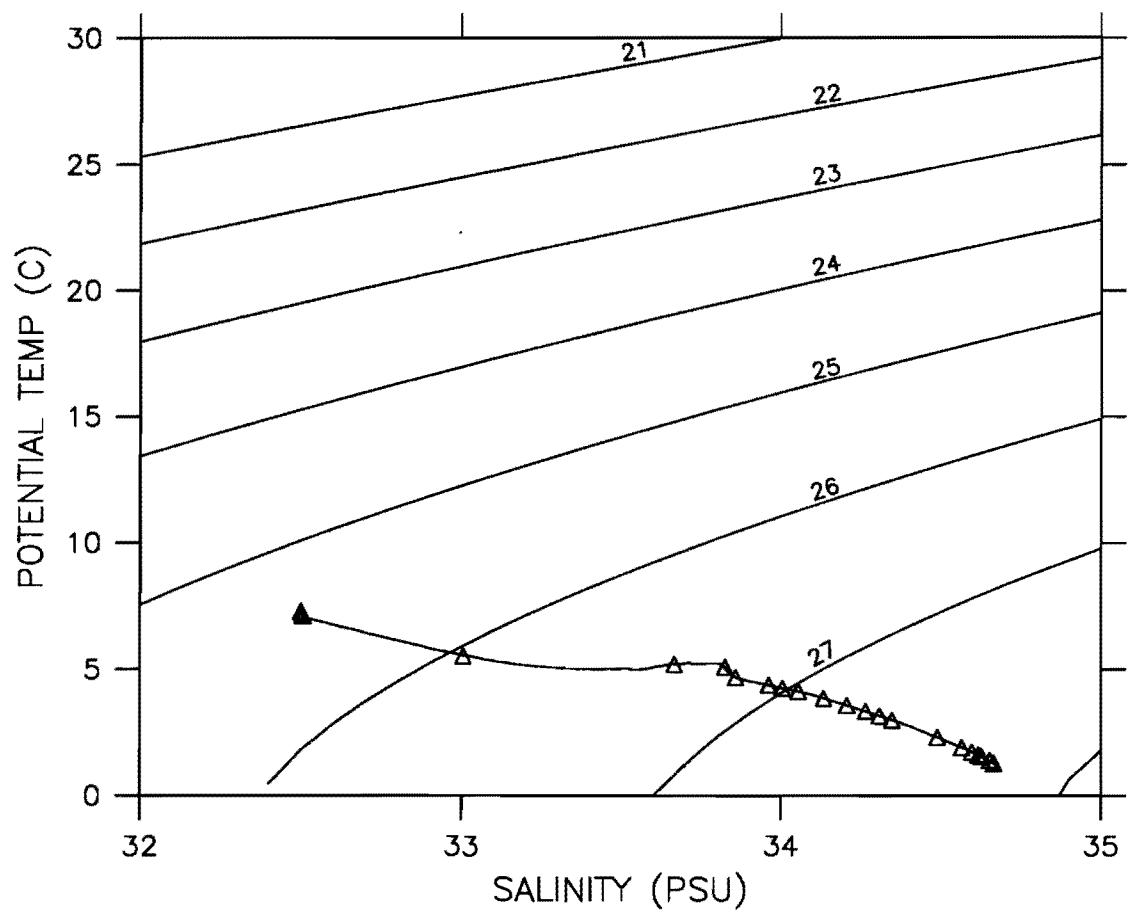


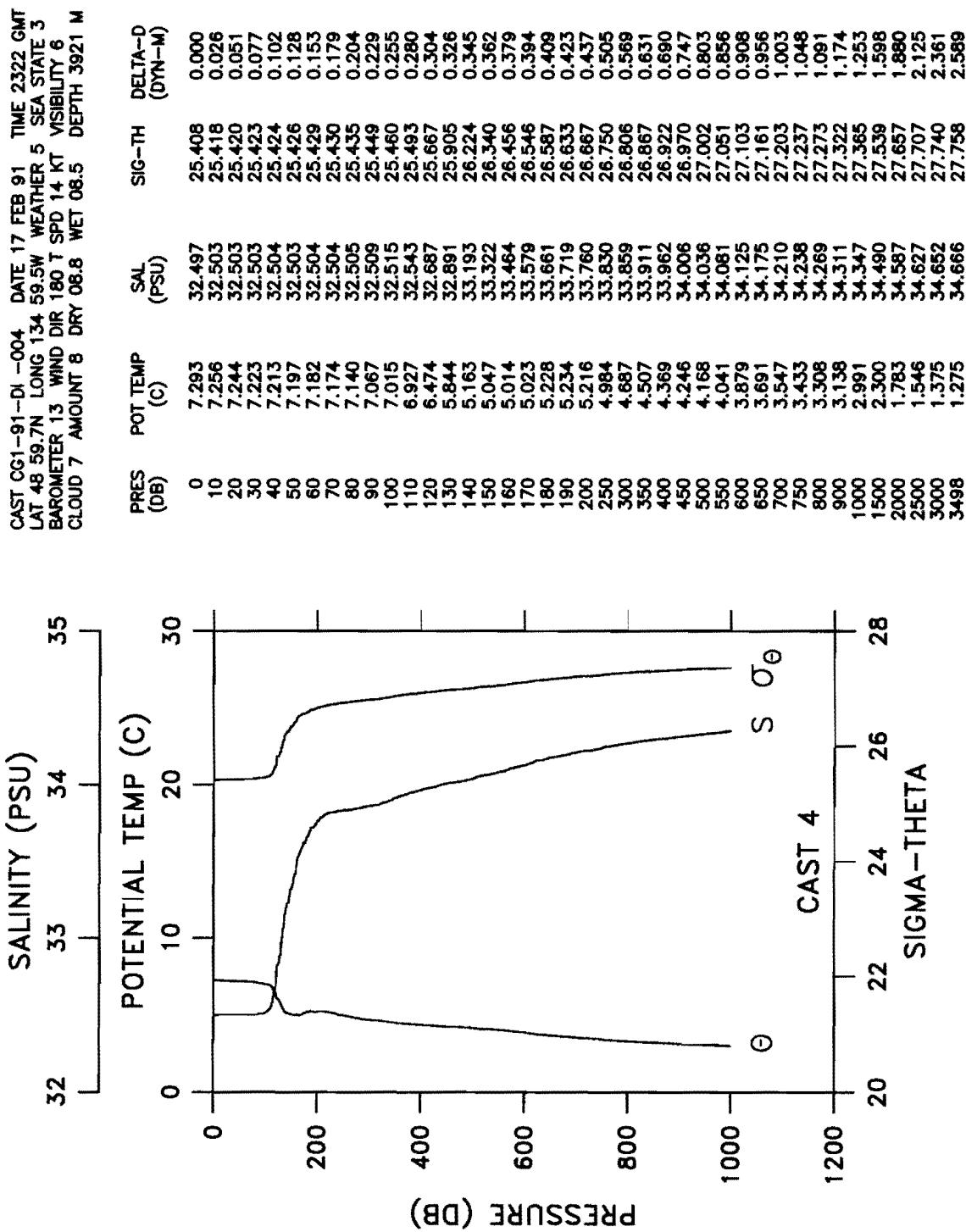
CAST CG1-91-DI -003 DATE 17 FEB 91 TIME 1219 GMT
 LAT 50 00.2N LONG 134 59.8W WEATHER 1 SEA STATE 3
 BAROMETER 17 WIND DIR 172 T SPD 13 KT VISIBILITY 8
 CLOUD 0 AMOUNT 9 DRY 06.7 WET 05.1 DEPTH 3480 M

PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DN-M)
0	6.823	32.501	25.474	0.000
10	6.814	32.501	25.475	0.025
20	6.814	32.501	25.475	0.050
30	6.815	32.502	25.476	0.075
40	6.817	32.502	25.476	0.100
50	6.829	32.510	25.480	0.125
60	6.836	32.518	25.486	0.150
70	6.810	32.522	25.492	0.175
80	6.768	32.527	25.502	0.200
90	6.750	32.532	25.511	0.224
100	6.700	32.564	25.540	0.249
110	6.343	32.927	25.872	0.272
120	5.935	33.173	26.118	0.293
130	5.887	33.400	26.303	0.311
140	6.045	33.554	26.405	0.327
150	6.006	33.700	26.525	0.343
160	5.975	33.741	26.561	0.358
170	5.951	33.780	26.595	0.373
180	6.017	33.827	26.624	0.388
190	5.878	33.834	26.647	0.402
200	5.847	33.858	26.669	0.416
250	5.322	33.899	26.765	0.483
300	5.037	33.939	26.830	0.546
350	4.750	33.976	26.891	0.607
400	4.450	34.018	26.958	0.665
450	4.254	34.056	27.009	0.720
500	4.130	34.107	27.063	0.773
550	3.991	34.143	27.106	0.824
600	3.912	34.182	27.145	0.873
650	3.785	34.213	27.182	0.921
700	3.711	34.228	27.202	0.967
750	3.579	34.268	27.246	1.012
800	3.468	34.294	27.278	1.055
900	3.211	34.328	27.329	1.138
1000	3.048	34.374	27.381	1.216
1500	2.248	34.499	27.550	1.554
2000	1.791	34.585	27.655	1.833
2500	1.501	34.634	27.716	2.079
3000	1.368	34.653	27.741	2.311
3500	1.292	34.666	27.757	2.540
3505	1.291	34.665	27.756	2.542

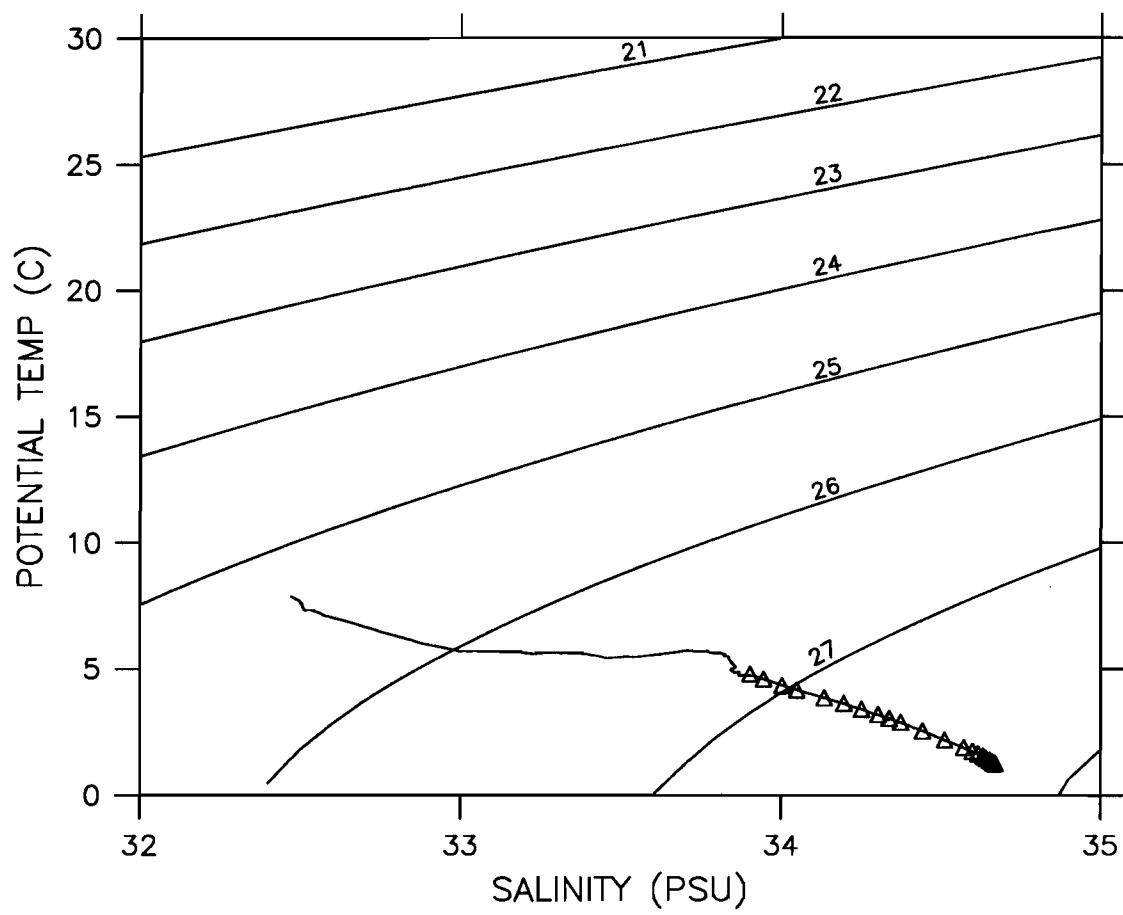


CAST CG1-91-DI -004 DATE 17 FEB 91 TIME 2322 GMT
LAT 48 59.7N LONG 134 59.5W

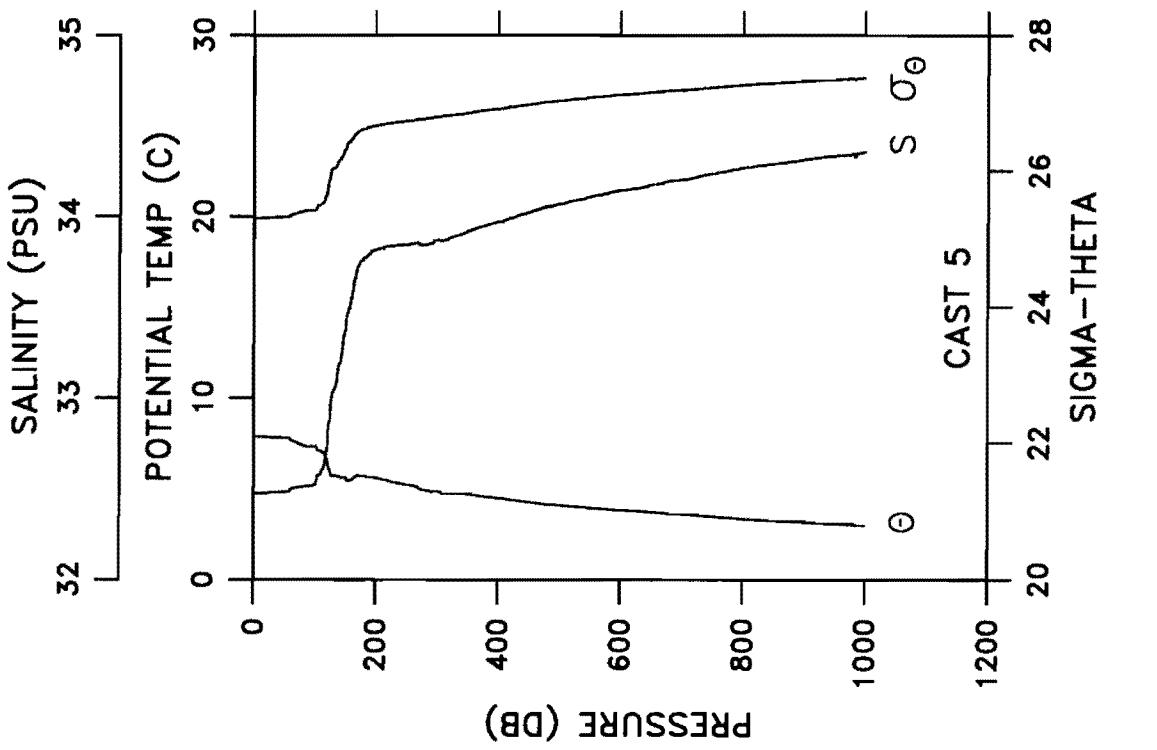




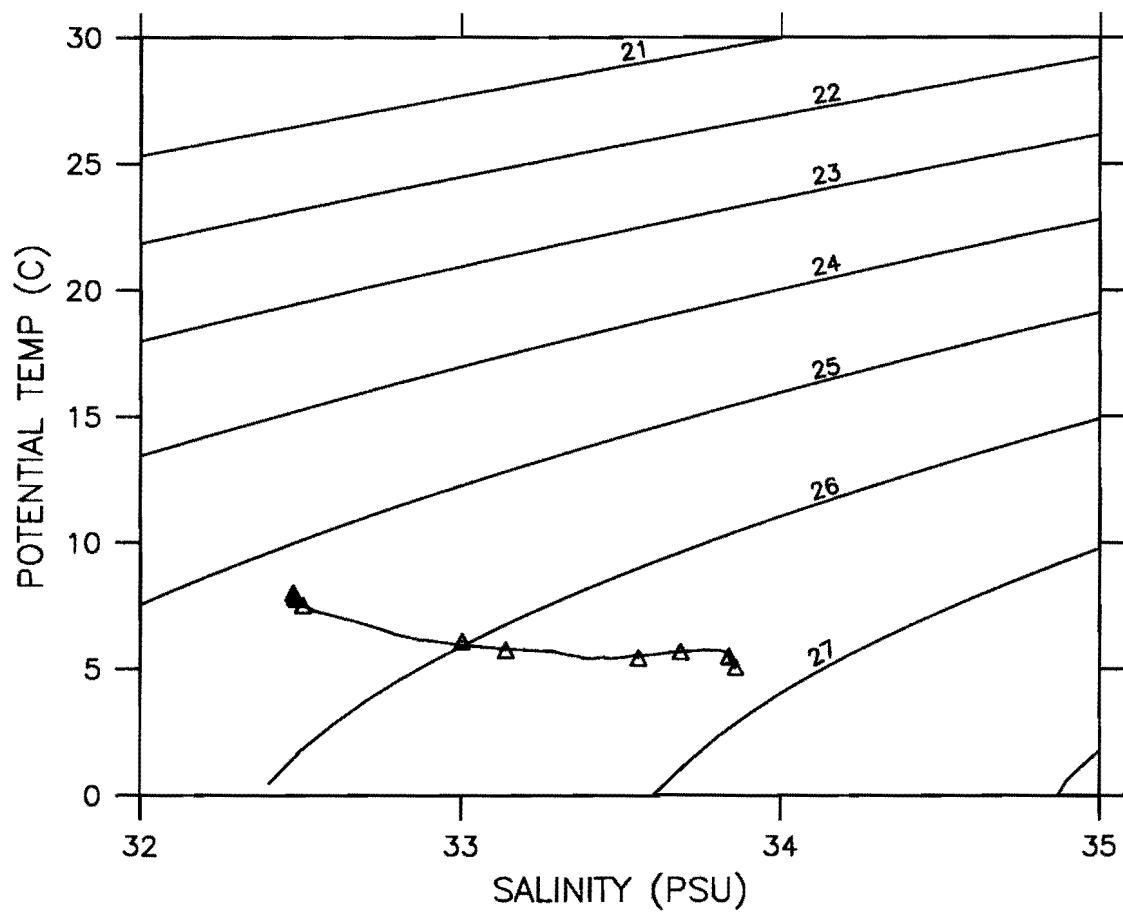
CAST CG1-91-DI -005 DATE 18 FEB 91 TIME 0922 GMT
LAT 47 59.5N LONG 134 58.7W



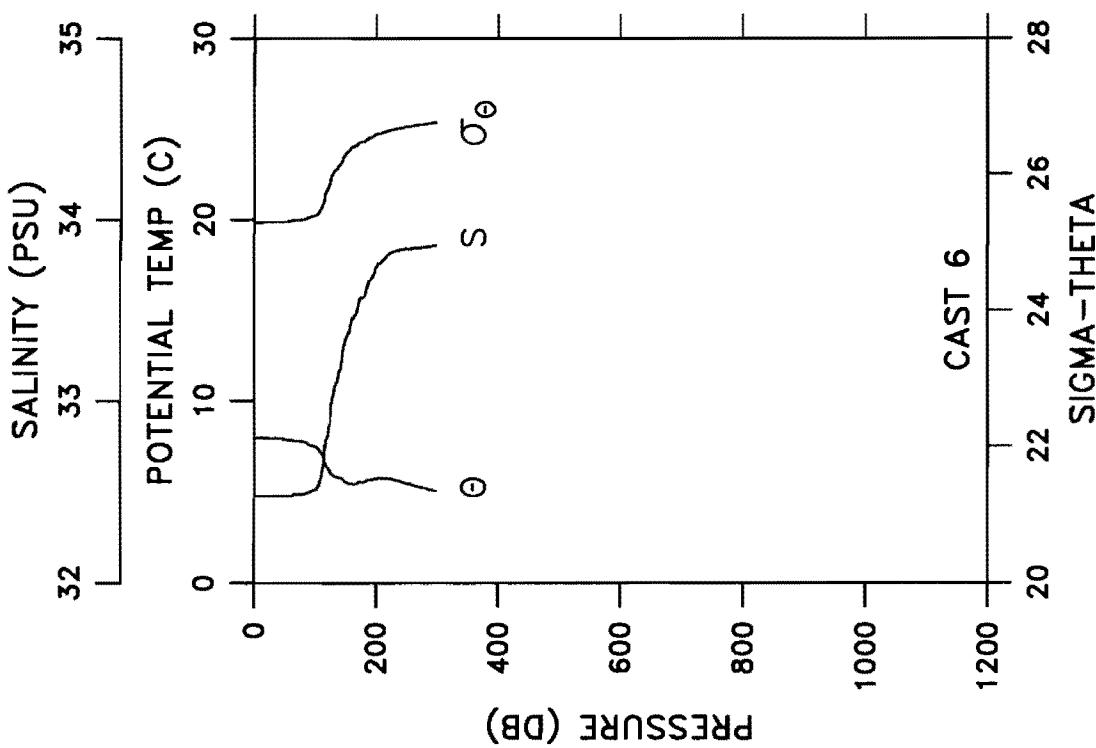
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 LAT 47 59.5N LONG 134 58.7W WEATHER 0 SEA STATE 3
 BAROMETER 15 WIND DIR 212 T SPD 17 KT VISIBILITY 7
 CLOUD 0 AMOUNT 0 DRY 10.0 WET 09.5 DEPTH 3742 M



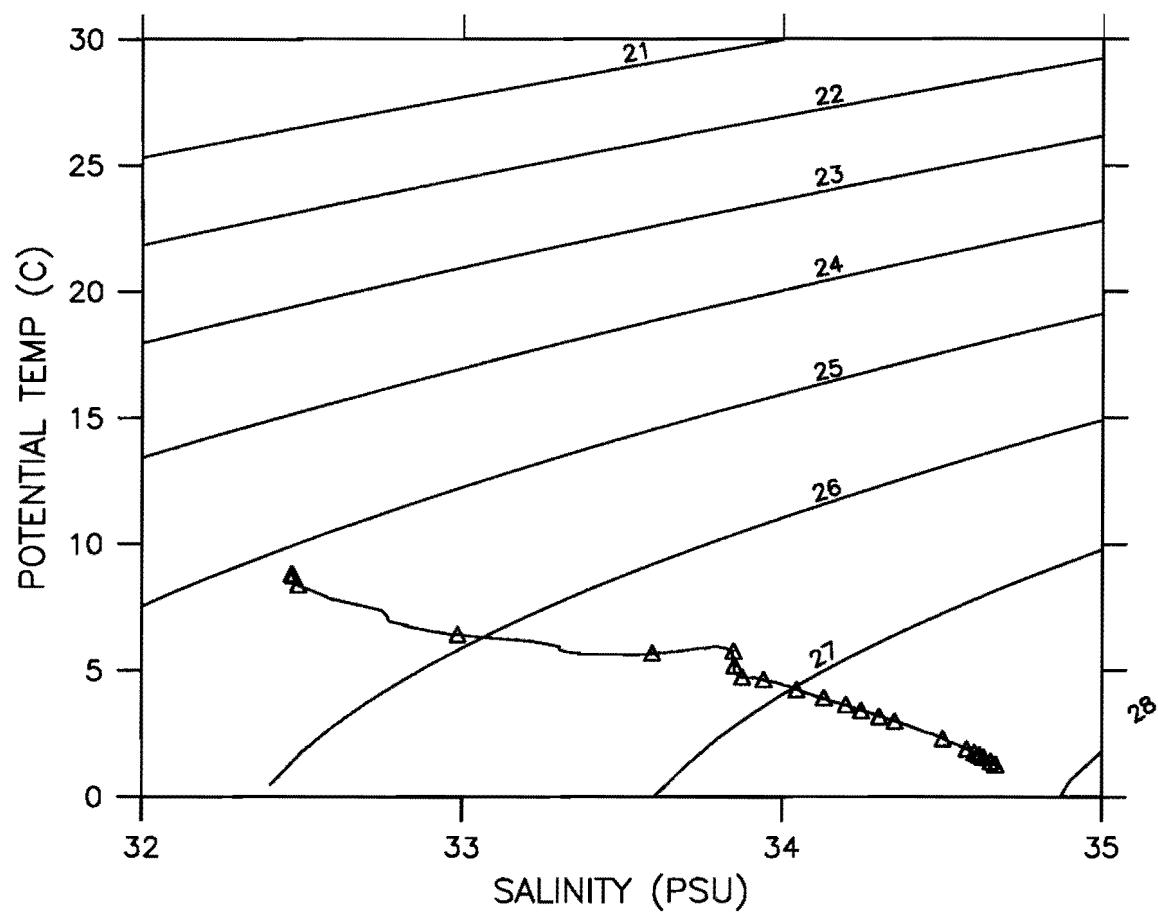
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LAT 47 59.5N LONG 134 59.4W



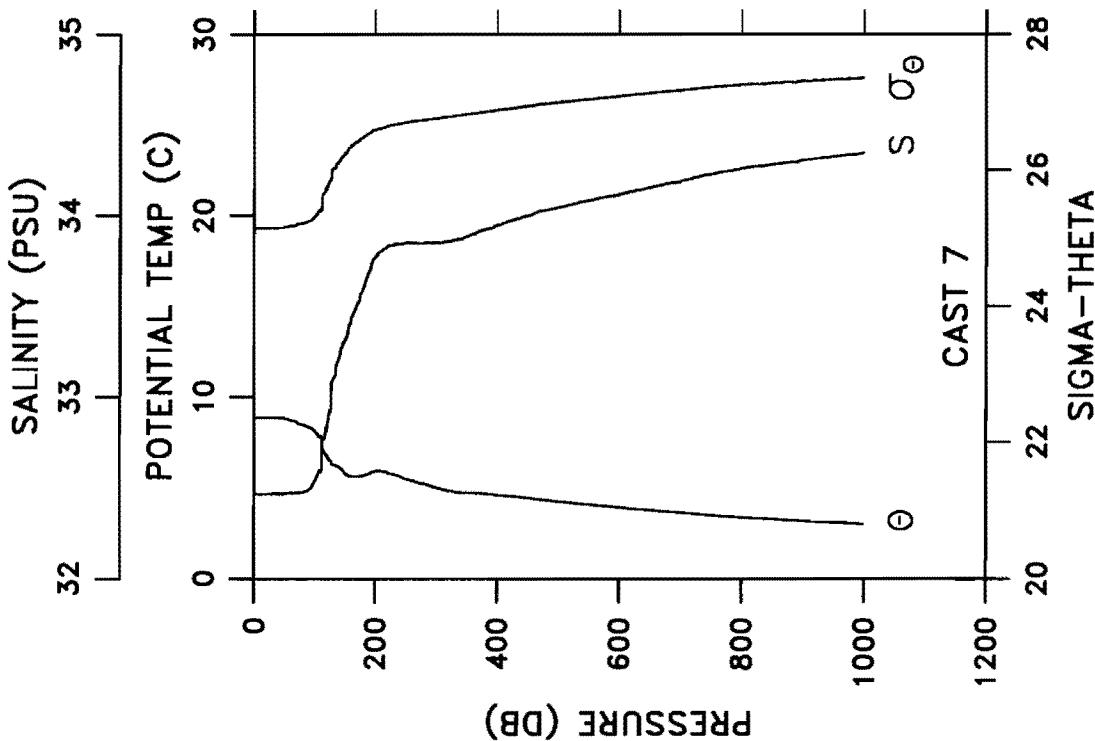
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 LAT 47 59.5N LONG 134 59.4W WEATHER 5 SEA STATE 4
 BAROMETER 10 WIND DIR 200 T SPD 26 KT VISIBILITY 6
 CLOUD 0 AMOUNT 9 DRY 10.5 WET 09.8 DEPTH 3652 M



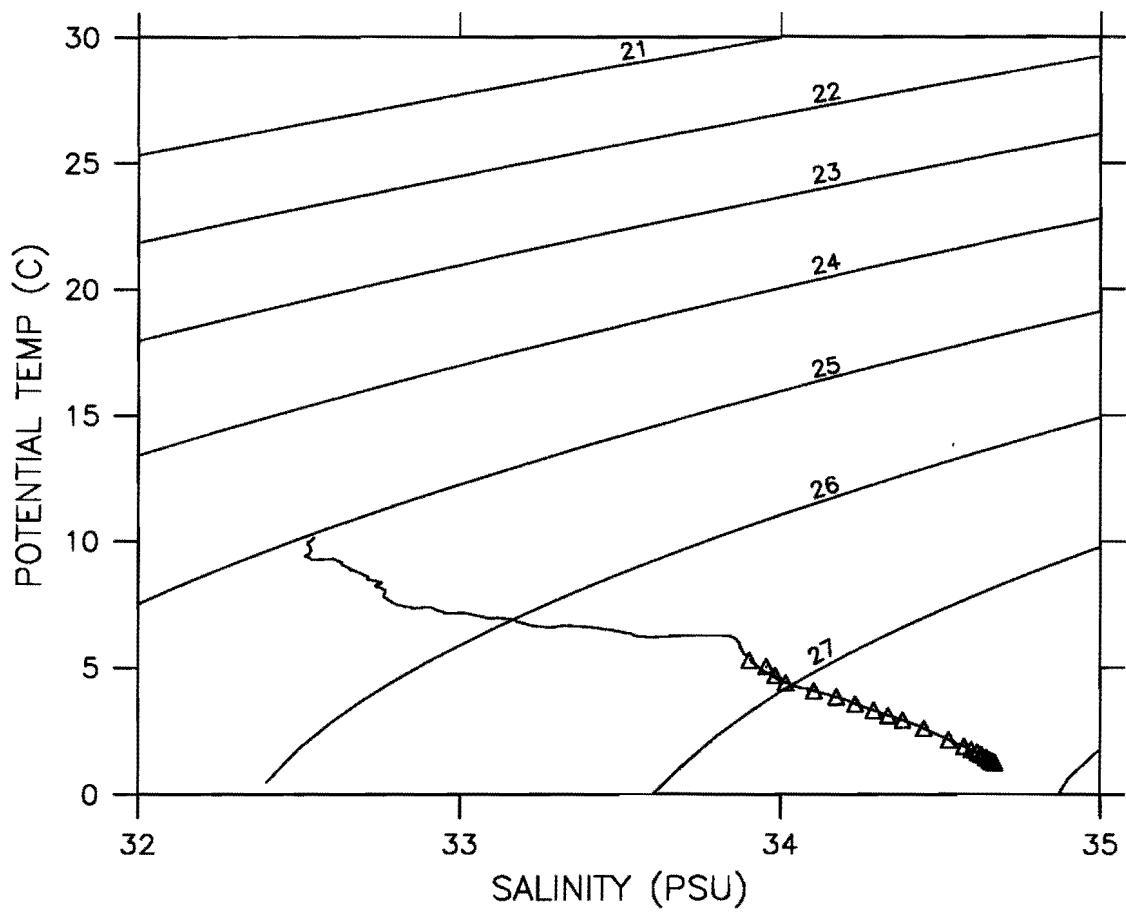
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LAT 46 59.2N LONG 134 59.8W



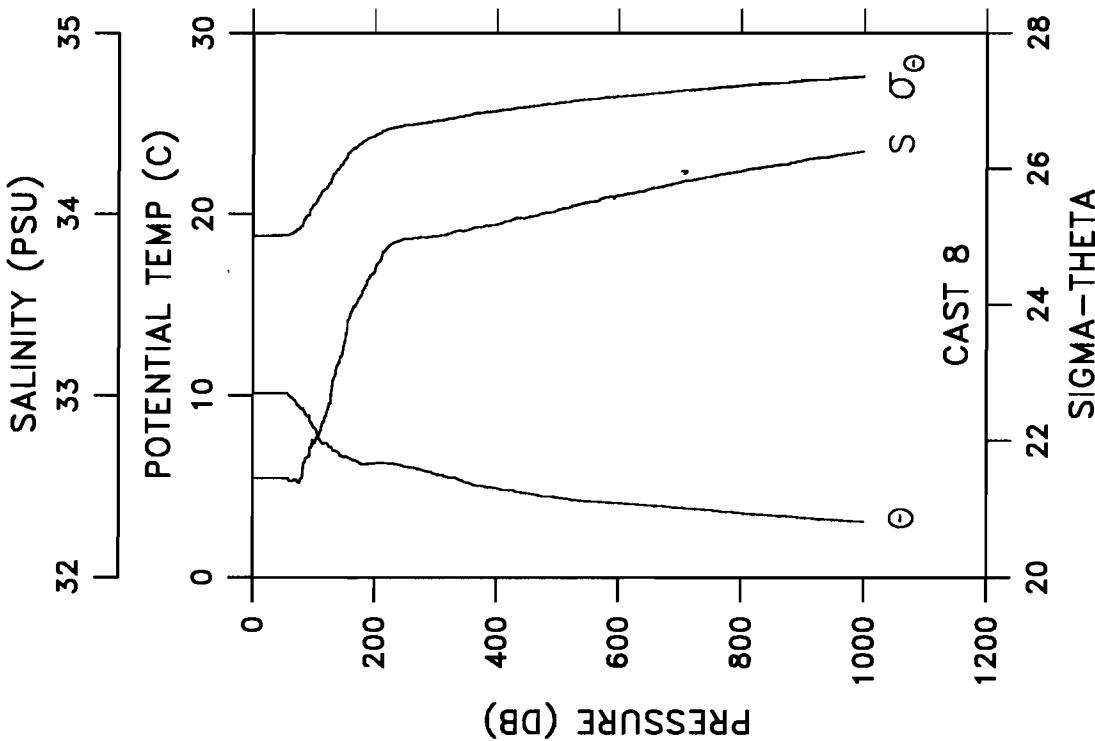
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LAT 46 59.2N LONG 134 59.8W		WEATHER 1		SEA STATE 5	
BAROMETER 09		WIND DIR 225 T		SPD 30 KT	
CLOUD 8 AMOUNT 6		DRY 10.9		WET 10.0	
DEPTH 4092 M					
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-0 (DYN-M)	
0	8.890	32.467	25.152	0.000	
10	8.889	32.466	25.152	0.028	
20	8.886	32.466	25.152	0.056	
30	8.863	32.467	25.156	0.084	
40	8.859	32.466	25.157	0.112	
50	8.823	32.469	25.164	0.140	
60	8.721	32.475	25.185	0.168	
70	8.611	32.475	25.201	0.196	
80	8.475	32.474	25.221	0.224	
90	8.332	32.489	25.254	0.251	
100	8.122	32.533	25.319	0.278	
110	7.849	32.585	25.400	0.304	
120	6.745	32.824	25.739	0.328	
130	6.268	33.099	26.017	0.349	
140	6.140	33.217	26.127	0.368	
150	5.770	33.317	26.251	0.387	
160	5.637	33.442	26.366	0.404	
170	5.625	33.509	26.420	0.420	
180	5.665	33.604	26.491	0.436	
190	5.783	33.698	26.551	0.452	
200	5.897	33.773	26.596	0.466	
250	5.487	33.850	26.707	0.536	
300	5.017	33.850	26.762	0.603	
350	4.721	33.885	26.823	0.667	
400	4.595	33.946	26.885	0.728	
450	4.444	33.998	26.943	0.787	
500	4.245	34.042	26.999	0.843	
550	4.087	34.082	27.047	0.897	
600	3.926	34.117	27.091	0.949	
650	3.780	34.154	27.135	0.999	
700	3.636	34.191	27.179	1.046	
750	3.497	34.227	27.221	1.092	
800	3.374	34.259	27.259	1.136	
900	3.184	34.305	27.313	1.221	
1000	3.011	34.346	27.362	1.301	
1500	2.301	34.502	27.549	1.644	
2000	1.814	34.588	27.656	1.925	
2500	1.557	34.630	27.709	2.174	
3000	1.386	34.652	27.739	2.409	
3500	1.266	34.667	27.760	2.639	
3502	1.266	34.667	27.760	2.640	



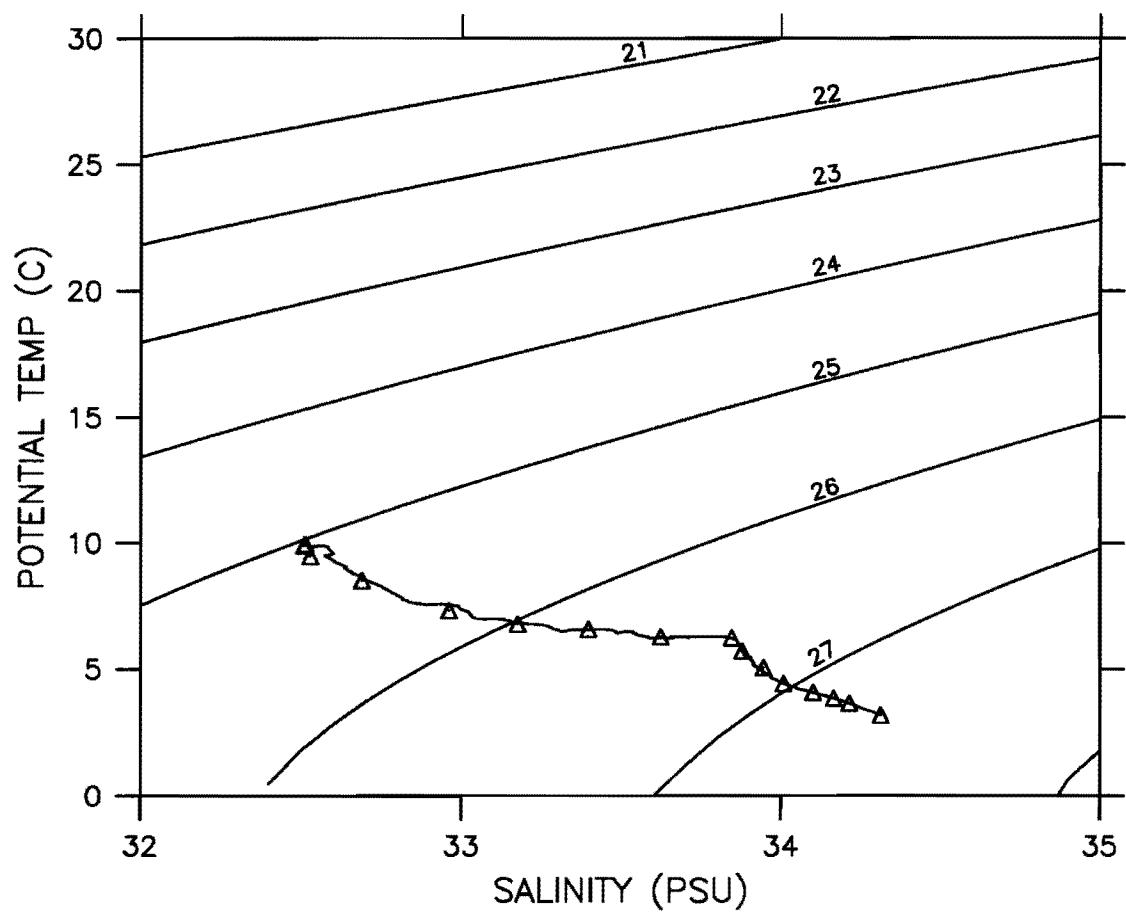
CAST CG1-91-DI -008 DATE 20 FEB 91 TIME 0234 GMT
LAT 46 00.2N LONG 135 01.1W

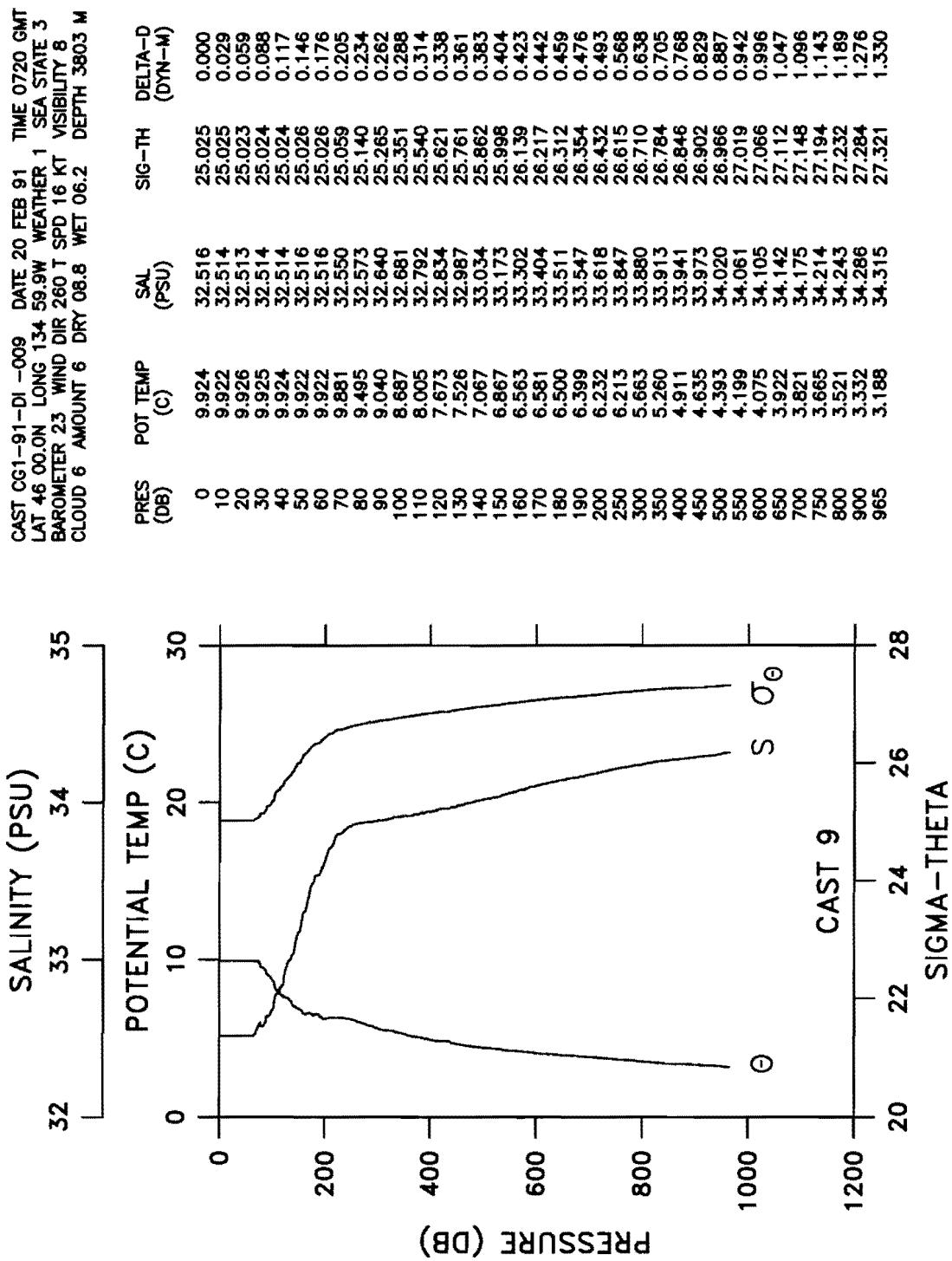


CAST CG1-91-DI -008		DATE 20 FEB 91	TIME 0234 GMT
LAT 46 00.2N	LONG 135 01.1W	WEATHER 2	SEA STATE 5
BAROMETER 21	WIND DIR 275 T	SPD 22 KT	VISIBILITY 8
CLOUD 6	AMOUNT 7	DRY 09.3	WET 07.3
DEPTH 3949 M			
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH (DYN-M)
0	10.134	32.547	25.015 0.000
10	10.133	32.546	25.015 0.029
20	10.133	32.546	25.014 0.059
30	10.127	32.547	25.016 0.088
40	10.114	32.546	25.017 0.117
50	10.092	32.543	25.019 0.147
60	9.955	32.527	25.029 0.176
70	9.635	32.538	25.090 0.205
80	9.266	32.544	25.154 0.234
90	8.858	32.662	25.310 0.261
100	8.231	32.739	25.465 0.287
110	7.518	32.801	25.616 0.311
120	7.392	32.899	25.711 0.335
130	7.055	33.058	25.882 0.357
140	6.861	33.176	26.001 0.377
150	6.603	33.294	26.128 0.397
160	6.516	33.458	26.269 0.415
170	6.408	33.508	26.322 0.433
180	6.227	33.579	26.401 0.450
190	6.242	33.644	26.451 0.466
200	6.275	33.687	26.481 0.482
250	6.087	33.865	26.645 0.555
300	5.672	33.878	26.707 0.625
350	5.221	33.910	26.785 0.692
400	4.899	33.941	26.848 0.755
450	4.624	33.982	26.910 0.815
500	4.391	34.020	26.966 0.873
550	4.181	34.064	27.023 0.928
600	4.082	34.101	27.062 0.981
650	3.955	34.137	27.105 1.032
700	3.819	34.176	27.149 1.082
750	3.713	34.205	27.183 1.130
800	3.538	34.237	27.225 1.175
900	3.283	34.297	27.297 1.262
1000	3.059	34.348	27.359 1.343
1500	2.280	34.504	27.552 1.688
2000	1.808	34.588	27.656 1.968
2500	1.559	34.630	27.709 2.216
3000	1.381	34.651	27.739 2.451
3500	1.273	34.667	27.760 2.680
3951	1.232	34.674	27.768 2.887

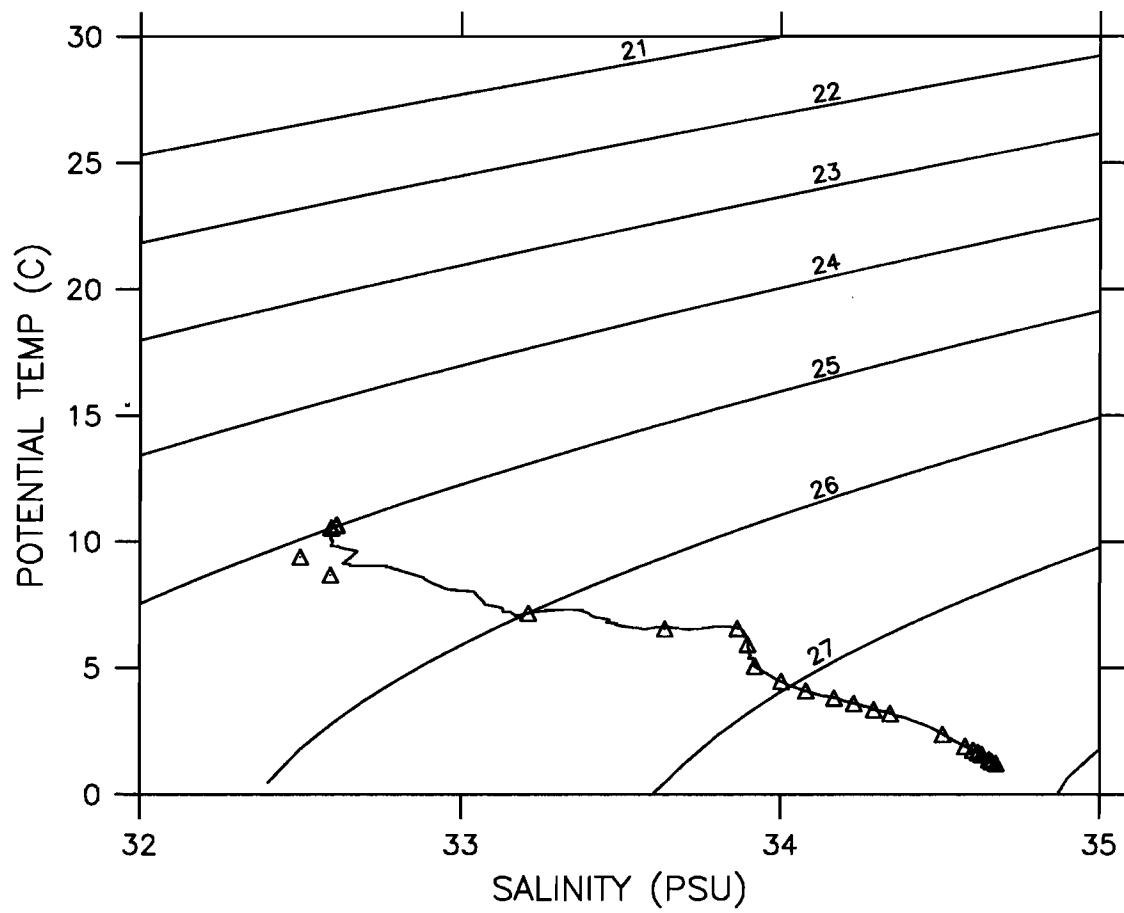


CAST CG1-91-DI -009 DATE 20 FEB 91 TIME 0720 GMT
LAT 46 00.0N LONG 134 59.9W

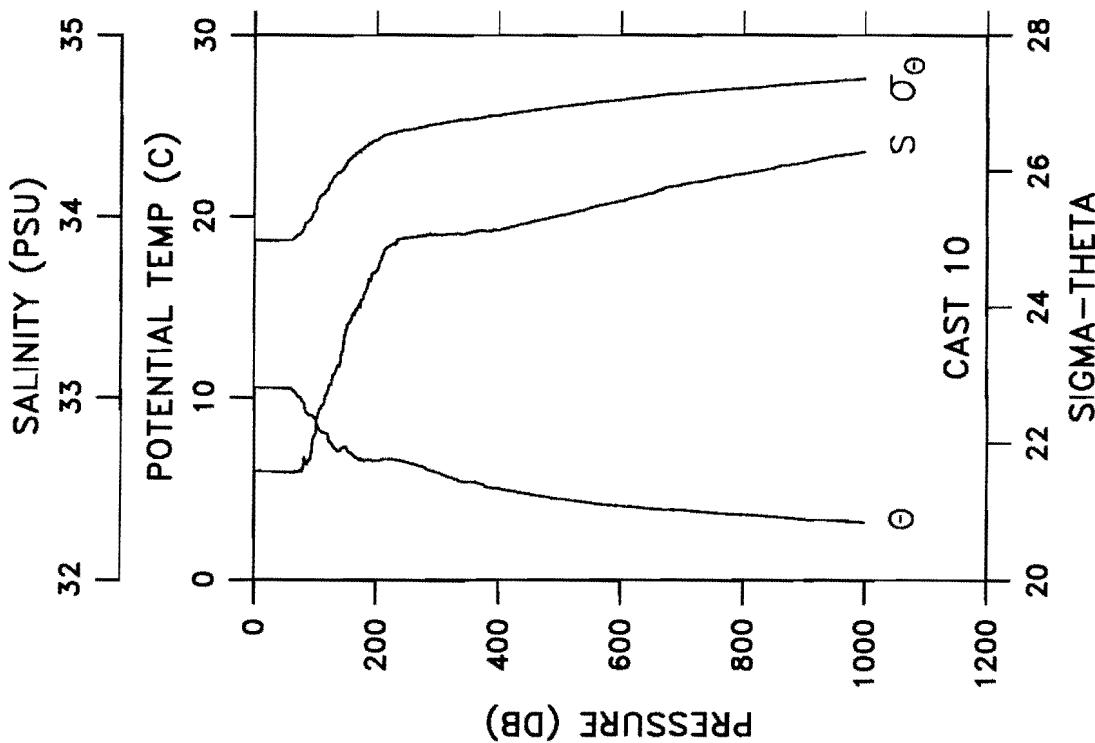




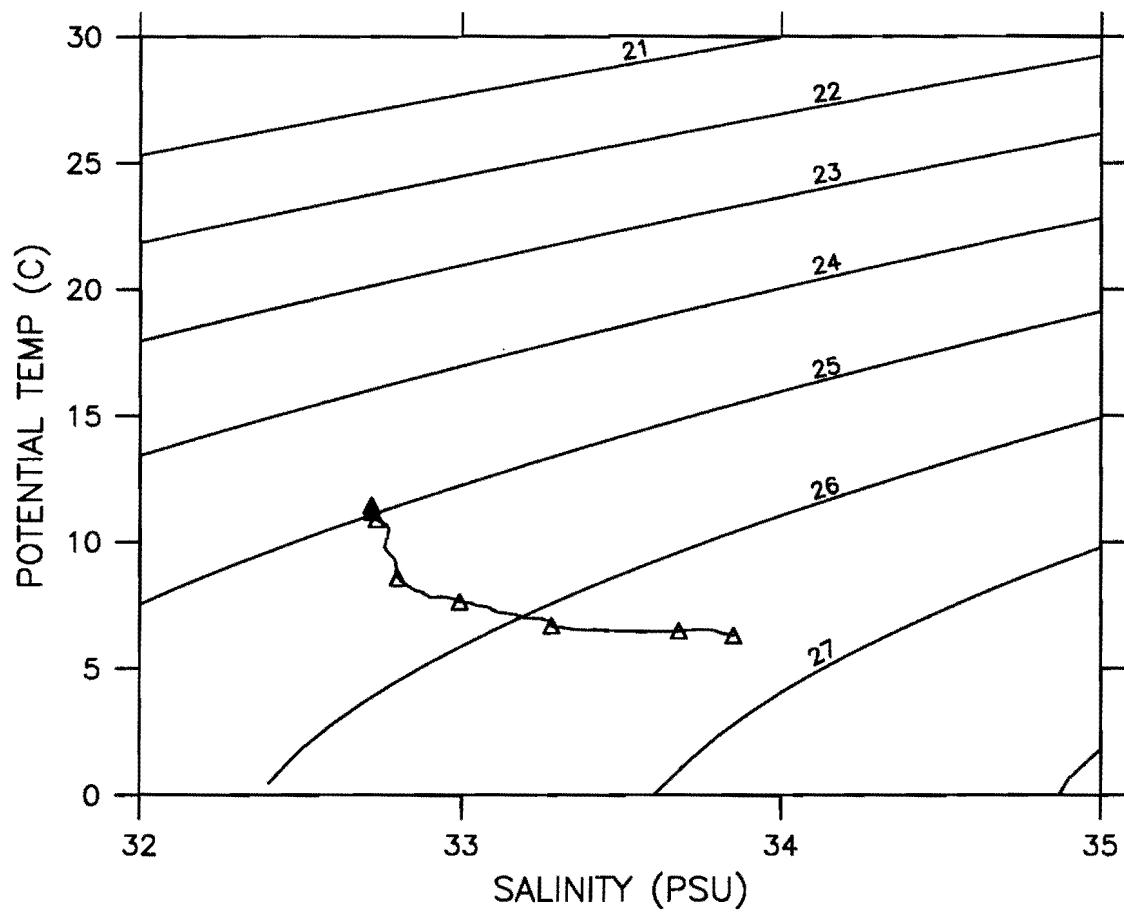
CAST CG1-91-DI -010 DATE 20 FEB 91 TIME 1636 GMT
LAT 45 00.3N LONG 135 00.2W



CAST CG1-91-DI -010		DATE 20 FEB 91		TIME 1636 GMT	
LAT 45 00.3N	LONG 135 00.2W	WEATHER 1	SEA STATE 4	CLOUD 6	AMT 6
BAROMETER 26	WIND DIR 000 T	SPD 03 KT	VISIBILITY 9	CLD 6	AMT 6
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	10.572	32.600	24.982	0.000	
10	10.566	32.599	24.982	0.030	
20	10.563	32.597	24.981	0.059	
30	10.566	32.596	24.980	0.089	
40	10.559	32.595	24.980	0.119	
50	10.526	32.591	24.983	0.149	
60	10.501	32.589	24.985	0.178	
70	10.154	32.593	25.047	0.208	
80	9.793	32.619	25.128	0.237	
90	9.053	32.656	25.275	0.264	
100	8.899	32.798	25.410	0.291	
110	8.131	32.955	25.649	0.315	
120	8.037	33.036	25.726	0.338	
130	7.305	33.130	25.905	0.360	
140	7.078	33.183	25.978	0.380	
150	7.291	33.379	26.102	0.400	
160	6.944	33.448	26.204	0.419	
170	6.666	33.492	26.276	0.437	
180	6.527	33.574	26.358	0.454	
190	6.589	33.651	26.411	0.471	
200	6.524	33.700	26.458	0.487	
250	6.459	33.882	26.611	0.562	
300	5.907	33.900	26.695	0.633	
350	5.386	33.910	26.766	0.700	
400	5.021	33.926	26.821	0.764	
450	4.713	33.966	26.888	0.826	
500	4.446	34.005	26.948	0.884	
550	4.229	34.046	27.004	0.941	
600	4.060	34.084	27.052	0.994	
650	3.900	34.128	27.103	1.046	
700	3.809	34.177	27.151	1.095	
750	3.670	34.207	27.189	1.143	
800	3.578	34.237	27.222	1.189	
900	3.329	34.297	27.294	1.276	
1000	3.150	34.357	27.358	1.357	
1500	2.375	34.510	27.549	1.706	
2000	1.808	34.594	27.662	1.985	
2500	1.562	34.632	27.710	2.231	
3000	1.376	34.653	27.741	2.465	
3500	1.280	34.667	27.758	2.694	
4000	1.223	34.676	27.770	2.925	
4041	1.217	34.676	27.770	2.944	

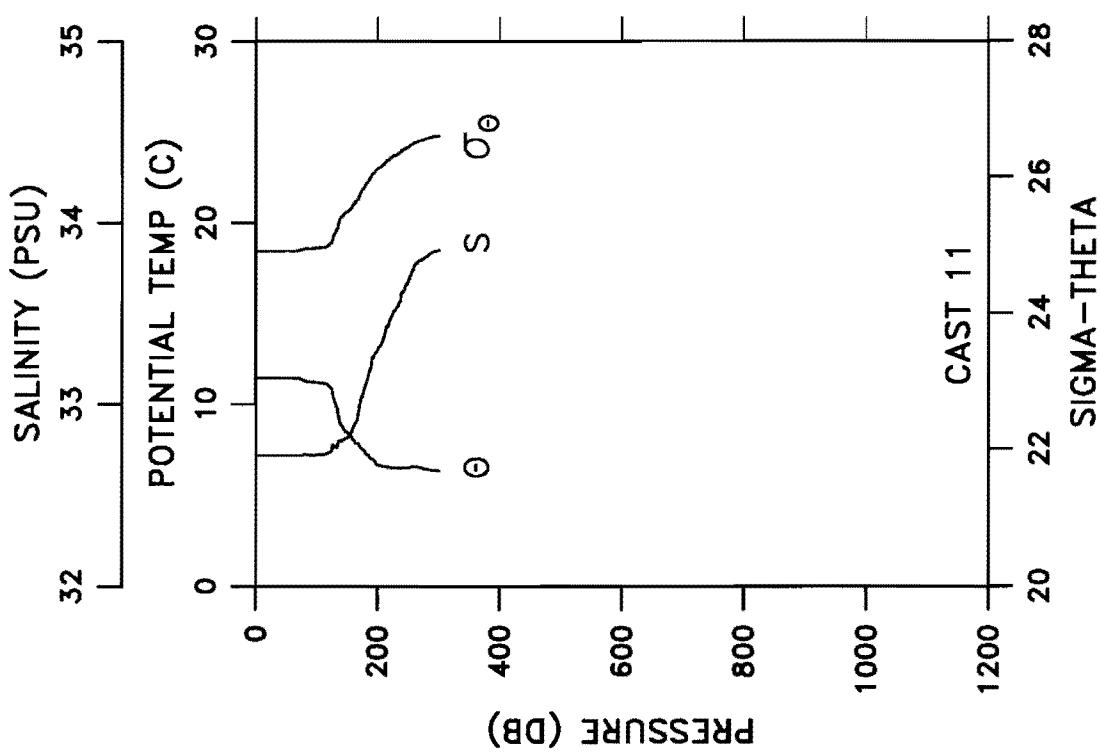


CAST CG1-91-DI -011 DATE 21 FEB 91 TIME 1614 GMT
LAT 43 59.9N LONG 135 00.2W

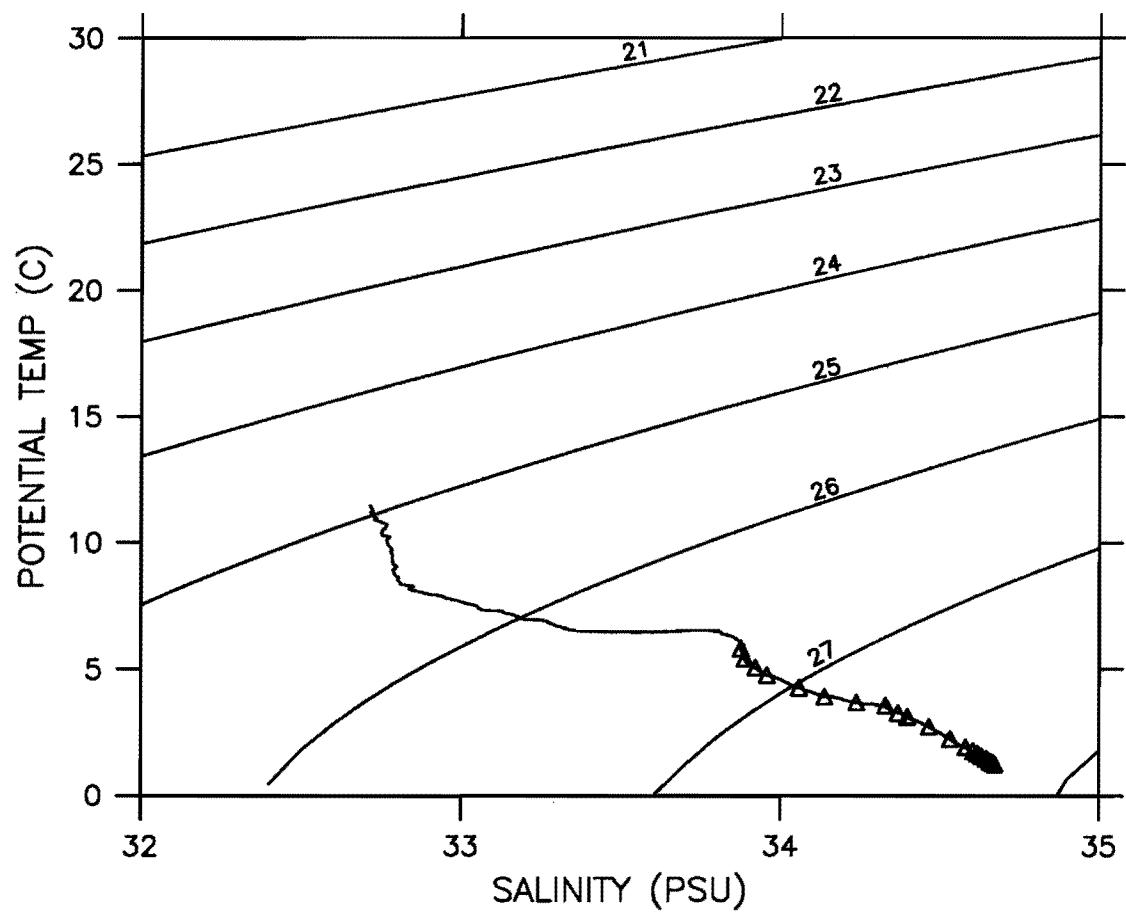


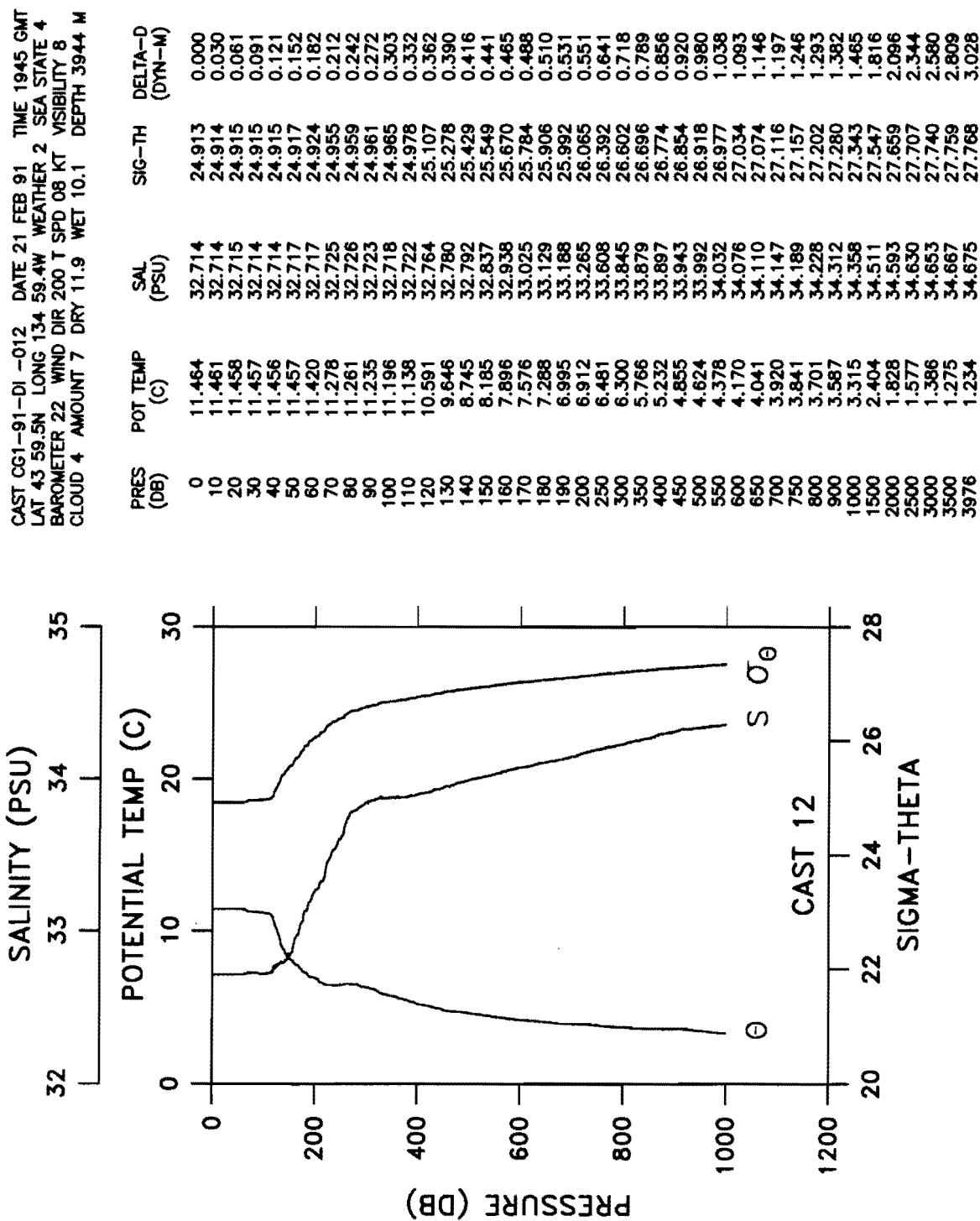
CAST CG1-91-DI-011 DATE 21 FEB 91 TIME 1614 GMT
 LAT 43 59.9N LONG 135 00.2W WEATHER 1 SEA STATE 2
 BAROMETER 21 WIND DIR 200 T SPD 06 KT VISIBILITY 9
 CLOUD 4 AMOUNT 2 DRY 11.4 WET 10.7 DEPTH 3944 M

PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	11.456	32.718	24.918	0.000
10	11.455	32.717	24.917	0.030
20	11.456	32.718	24.918	0.061
30	11.455	32.717	24.917	0.091
40	11.454	32.717	24.918	0.121
50	11.444	32.718	24.920	0.152
60	11.430	32.717	24.922	0.182
70	11.405	32.717	24.926	0.212
80	11.284	32.723	24.952	0.243
90	11.224	32.718	24.959	0.273
100	11.204	32.719	24.964	0.303
110	11.160	32.722	24.974	0.333
120	10.984	32.732	25.013	0.363
130	10.151	32.769	25.185	0.392
140	8.849	32.794	25.415	0.418
150	8.429	32.813	25.493	0.444
160	8.040	32.868	25.594	0.469
170	7.779	32.964	25.707	0.492
180	7.310	33.095	25.876	0.514
190	6.988	33.203	26.005	0.535
200	6.639	33.293	26.122	0.555
250	6.465	33.669	26.442	0.642
300	6.302	33.847	26.603	0.718
301	6.298	33.848	26.605	0.720

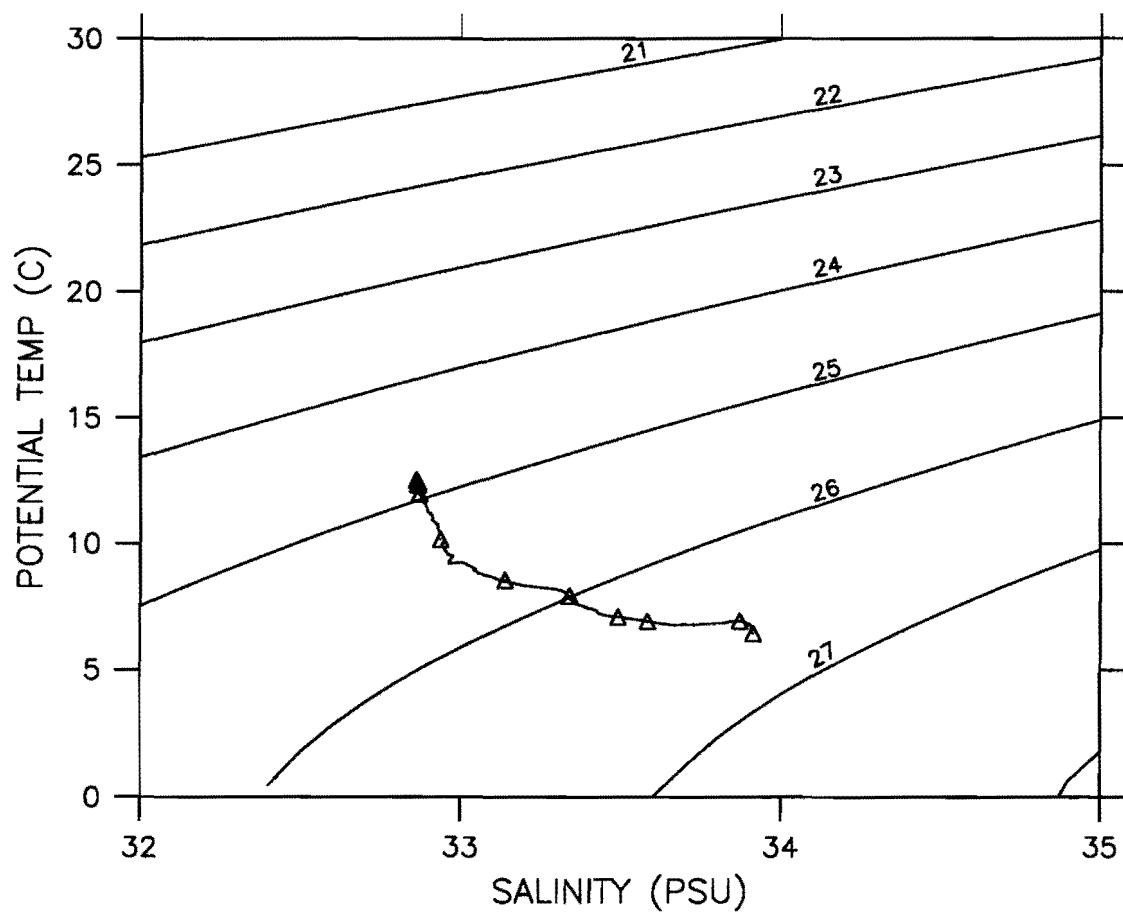


CAST CG1-91-DI -012 DATE 21 FEB 91 TIME 1945 GMT
LAT 43 59.5N LONG 134 59.4W

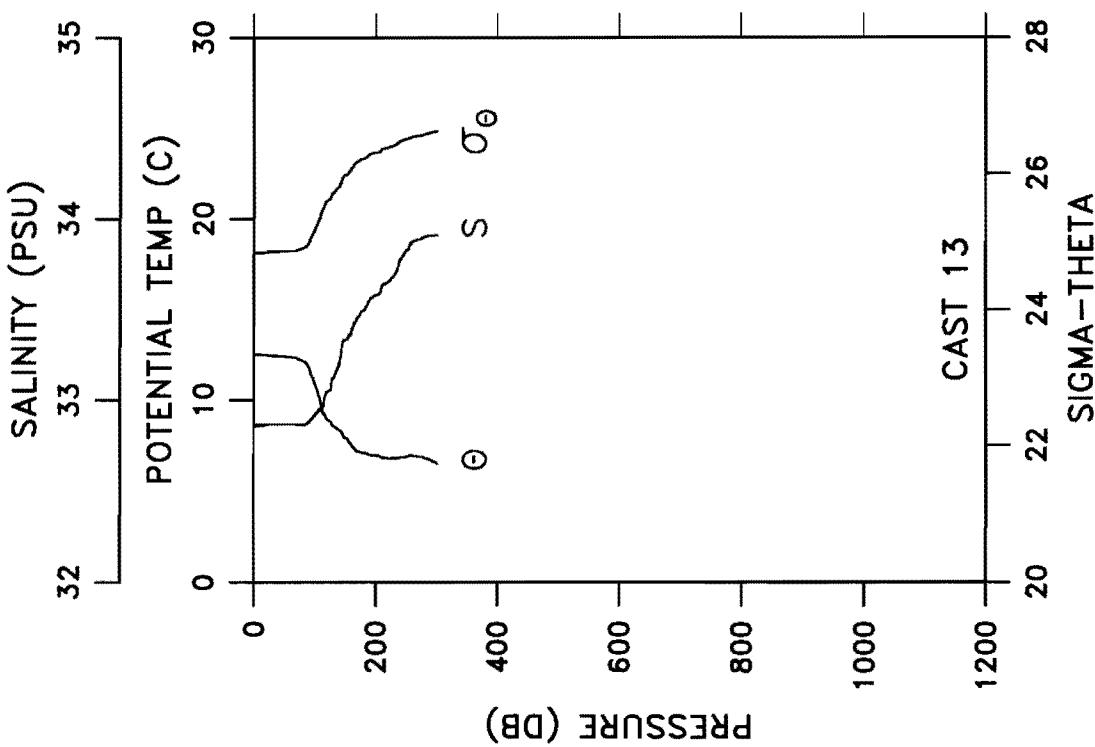




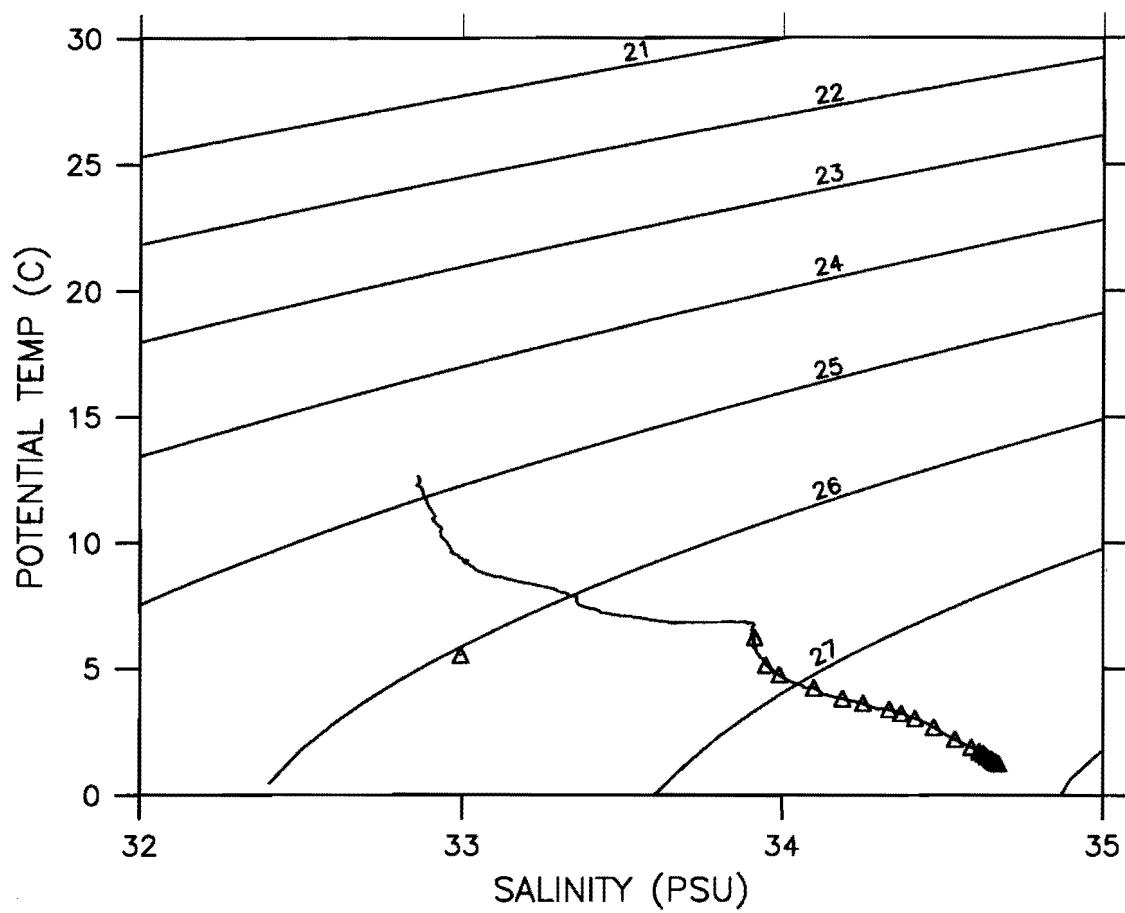
CAST CG1-91-DI -013 DATE 22 FEB 91 TIME 0711 GMT
LAT 41 59.9N LONG 134 59.5W

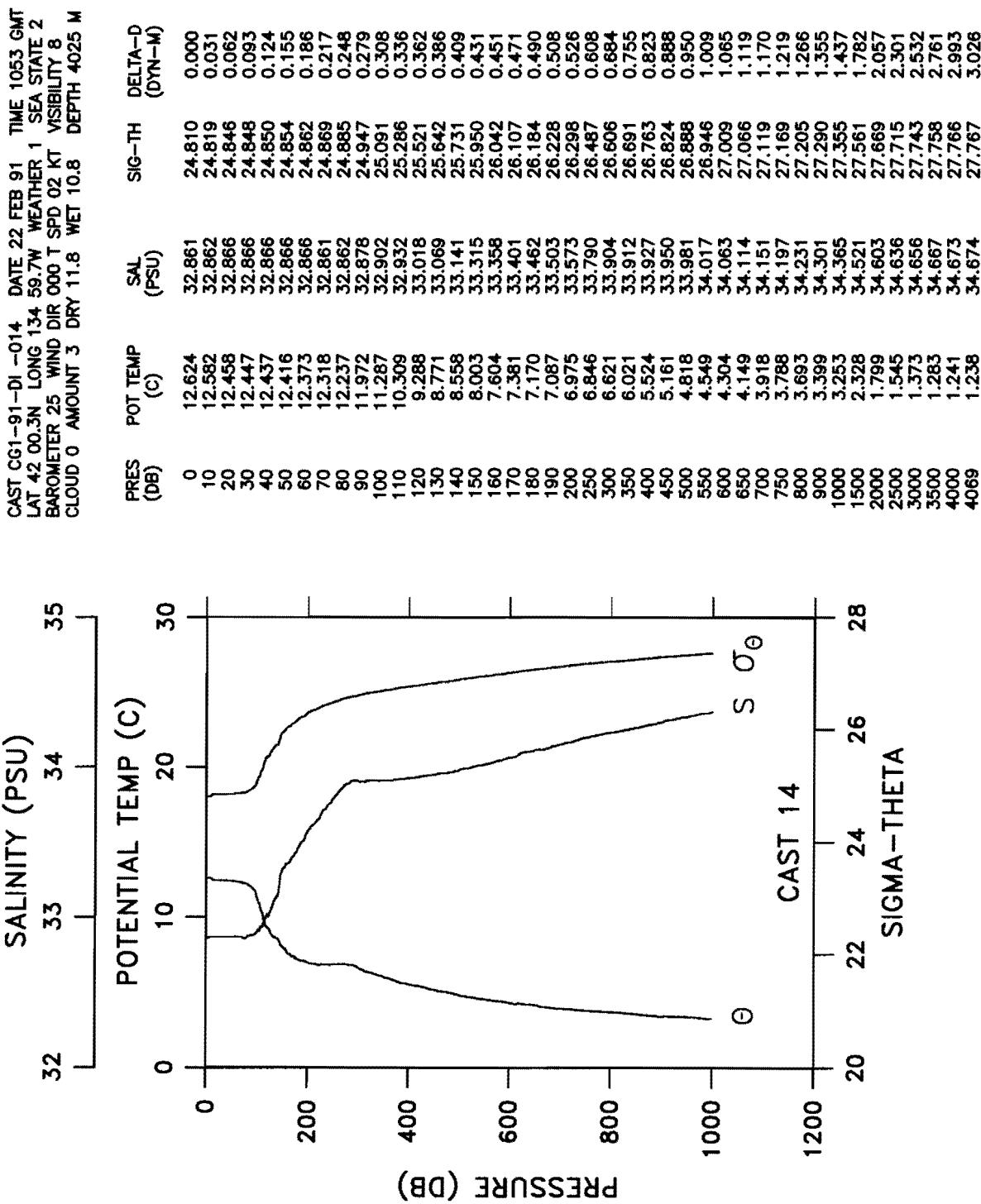


CAST CG1-91-DI -013 DATE 22 FEB 91 TIME 0711 GMT
 LAT 41 59 9N LONG 134 59.5W WEATHER 1 SEA STATE 2
 BAROMETER 09 WIND DIR 080 T SPD 06 KT VISIBILITY 8
 CLOUD 6 AMOUNT 4 DRY 12.3 WET 11.2 DEPTH 4023 M

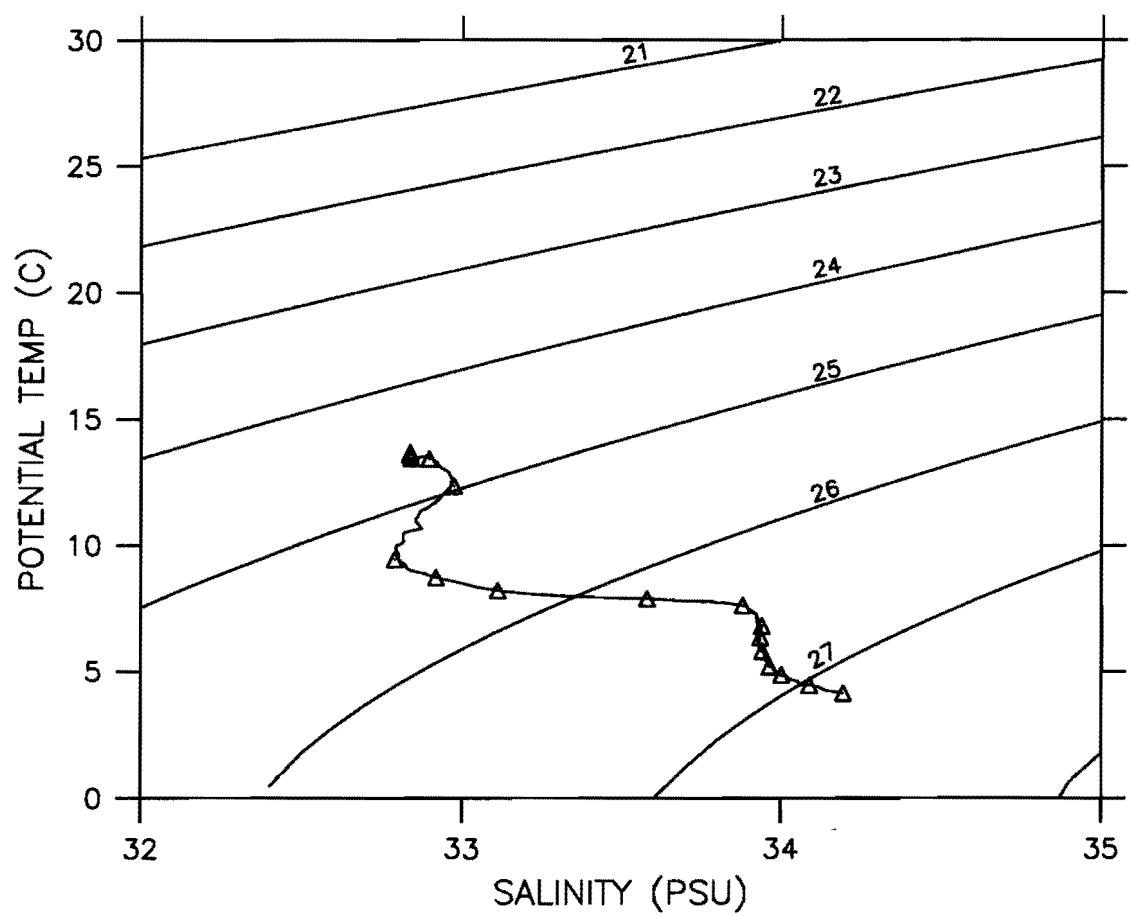


CAST CG1-91-DI -014 DATE 22 FEB 91 TIME 1053 GMT
LAT 42 00.3N LONG 134 59.7W

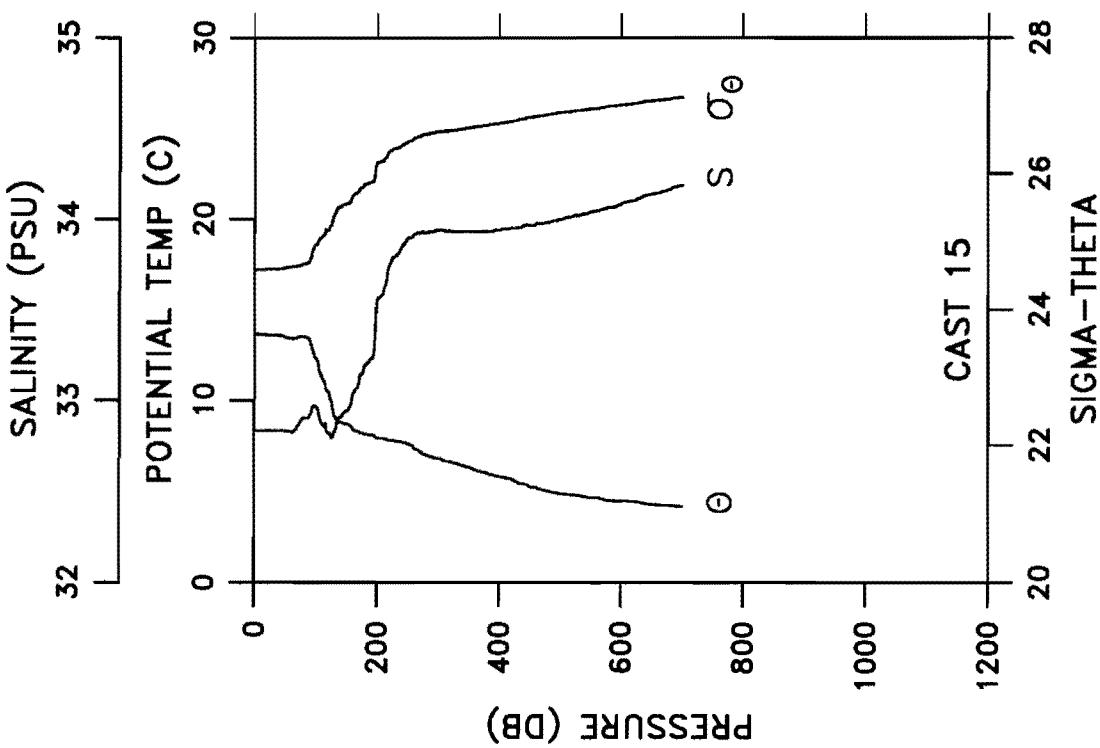




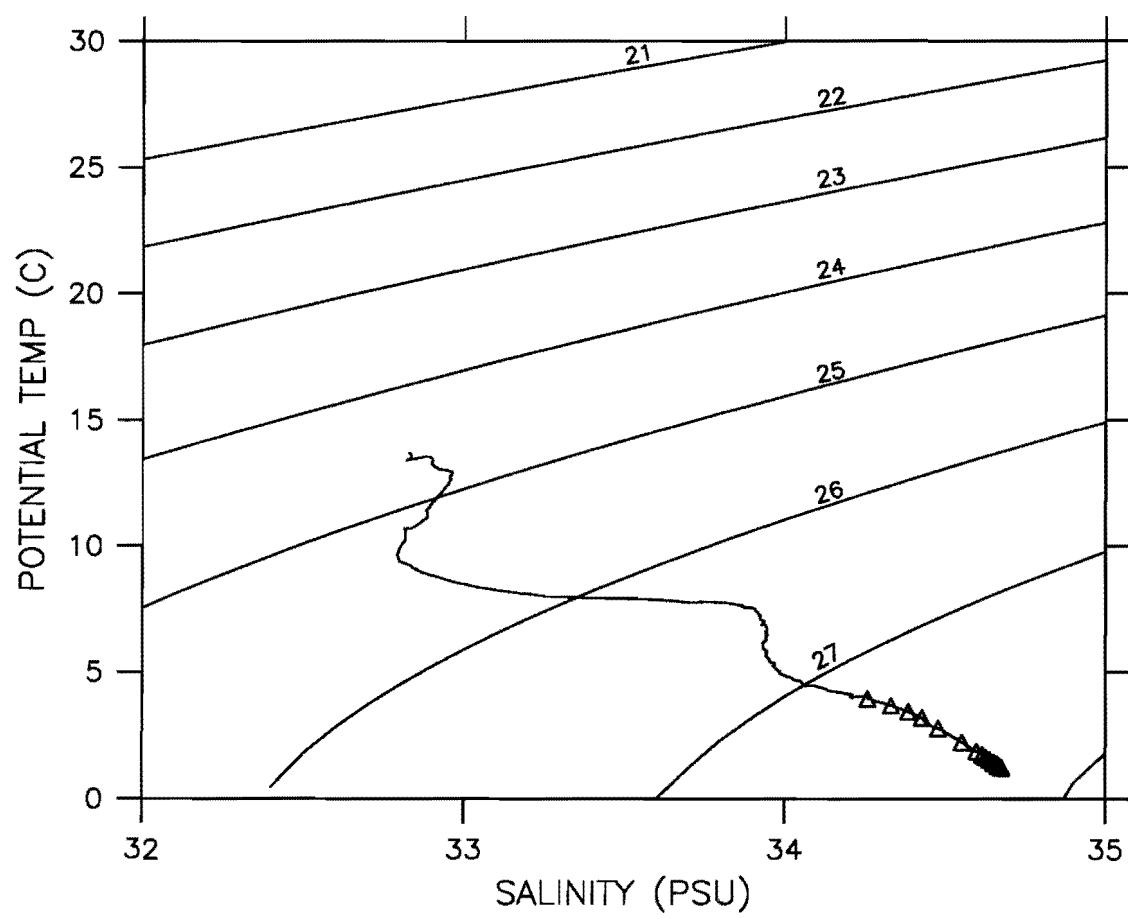
CAST CG1-91-DI -015 DATE 22 FEB 91 TIME 2205 GMT
LAT 40 00.0N LONG 135 00.0W

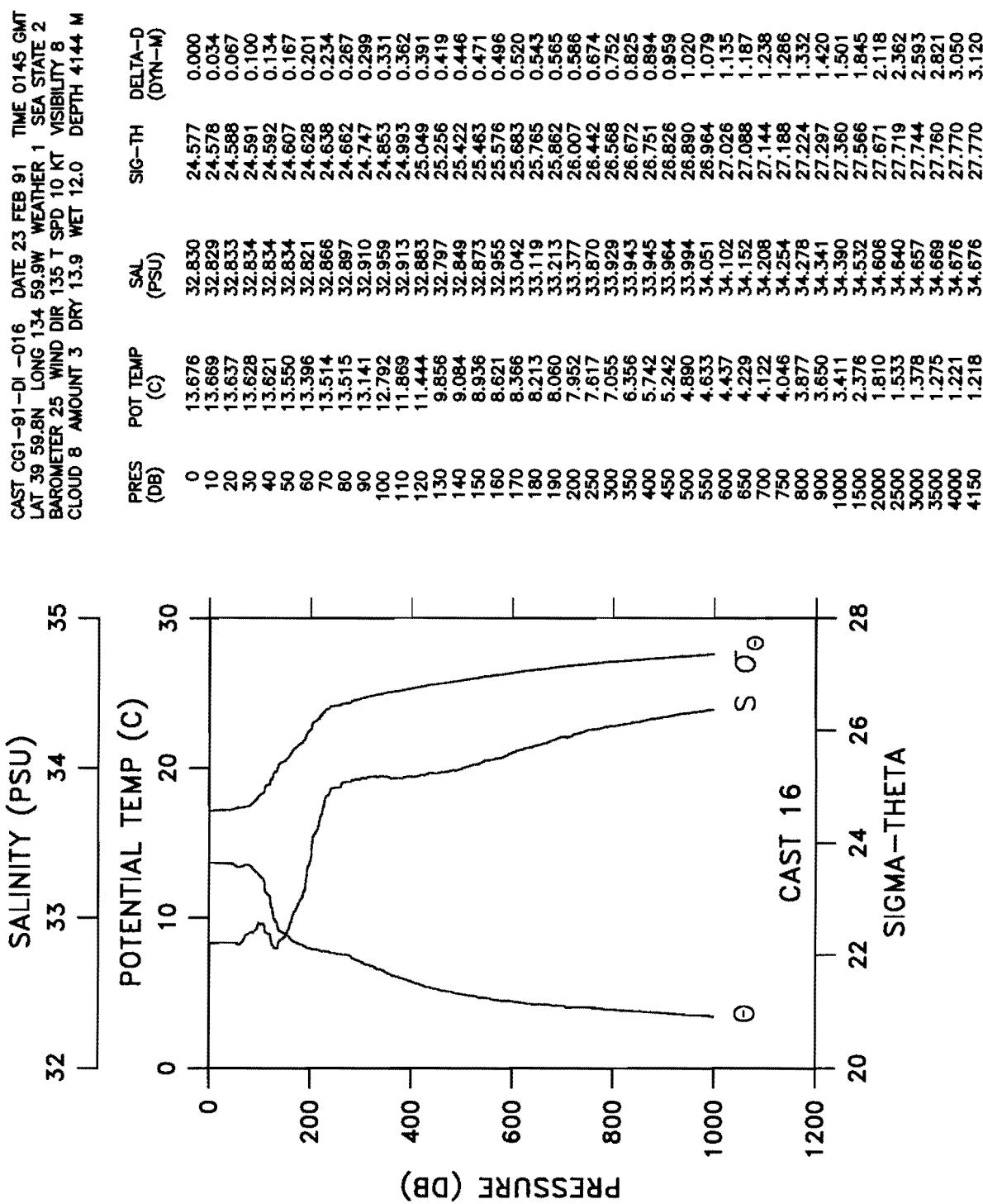


CAST CG1-91-DI -015 DATE 22 FEB 91 TIME 2205 GMT
 LAT 40 00.0N LONG 135 00.0W WEATHER 1 SEA STATE 3
 BAROMETER 25 WIND DIR 125 T SPD 17 KT VISIBILITY 8
 CLOUD 3 AMOUNT 2 DRY 13.6 WET 11.1 DEPTH 4138 M

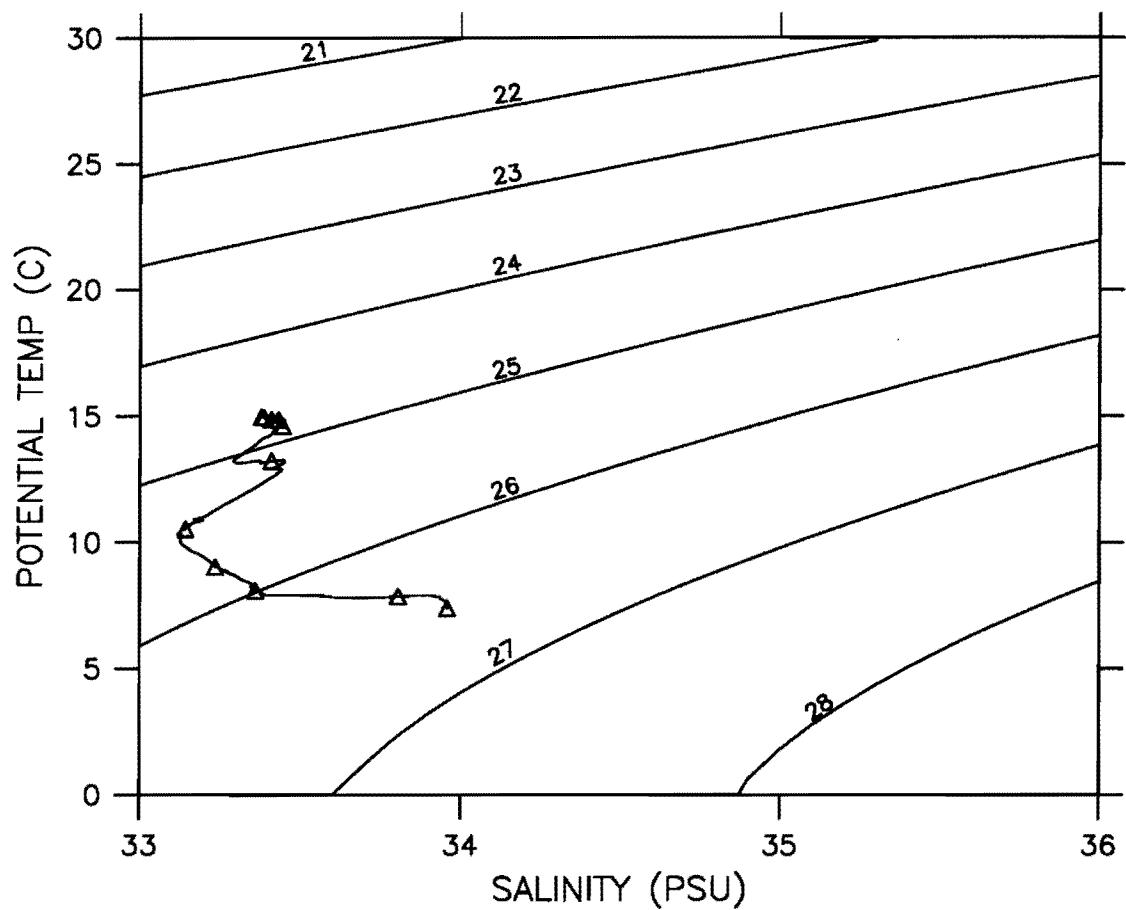


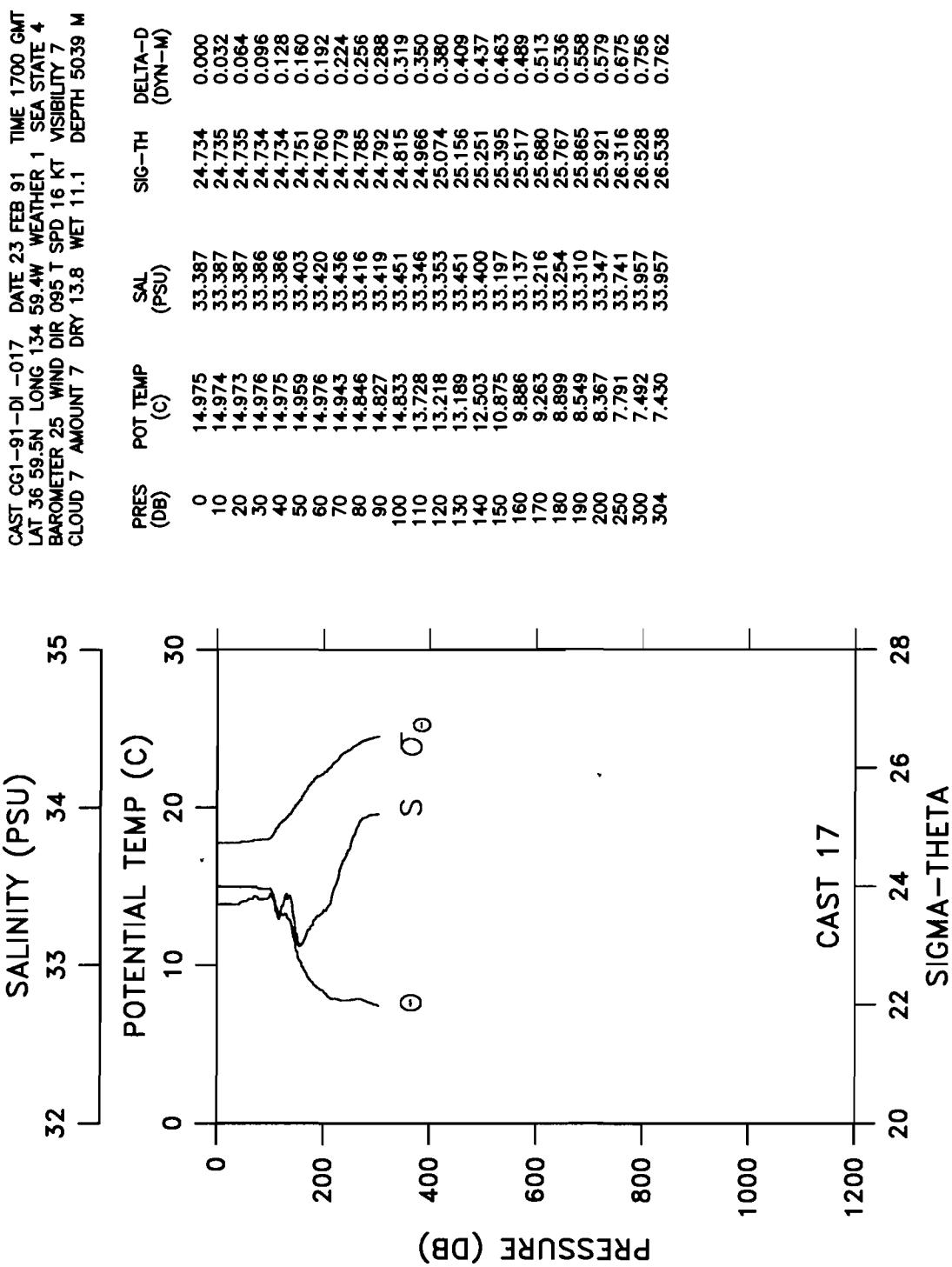
CAST CG1-91-DI -016 DATE 23 FEB 91 TIME 0145 GMT
LAT 39 59.8N LONG 134 59.9W



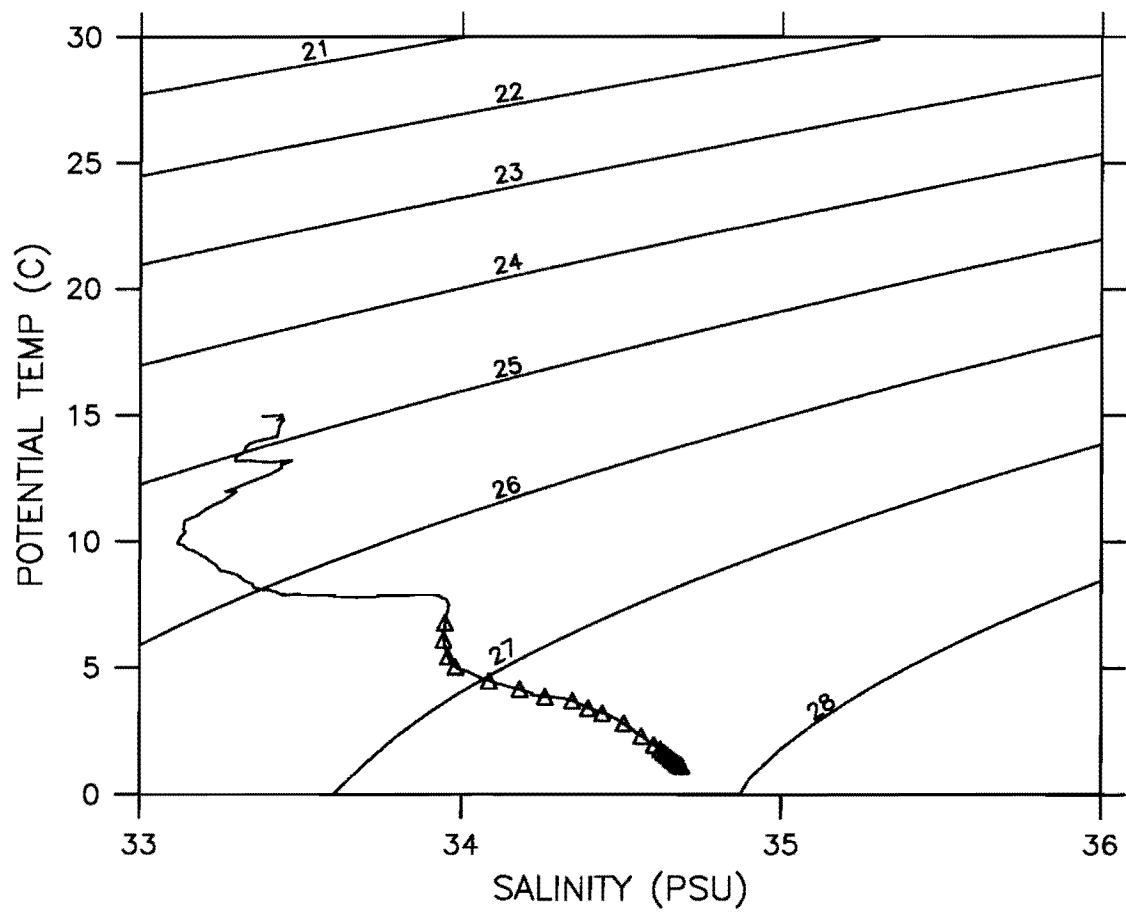


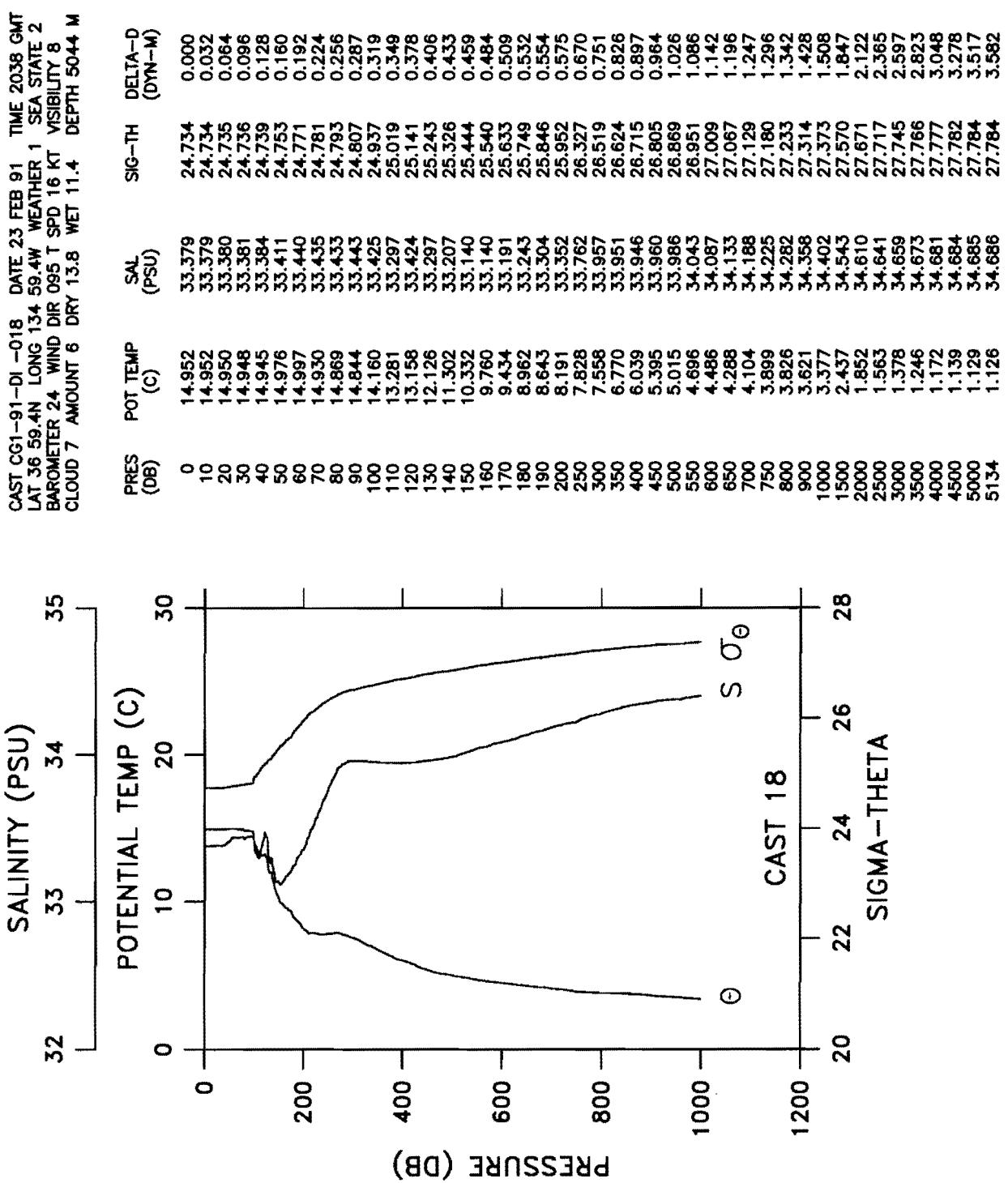
CAST CG1-91-DI -017 DATE 23 FEB 91 TIME 1700 GMT
LAT 36 59.5N LONG 134 59.4W



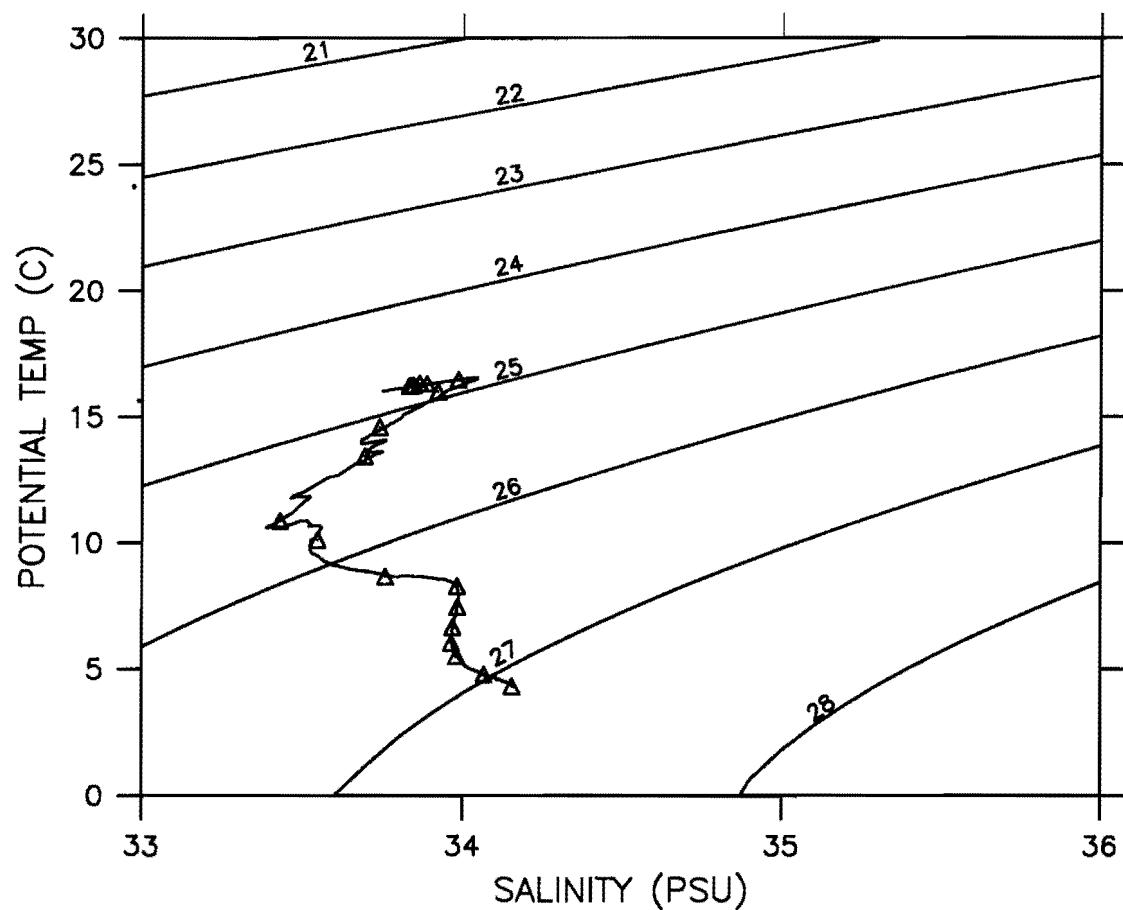


CAST CG1-91-DI -018 DATE 23 FEB 91 TIME 2038 GMT
LAT 36 59.4N LONG 134 59.4W



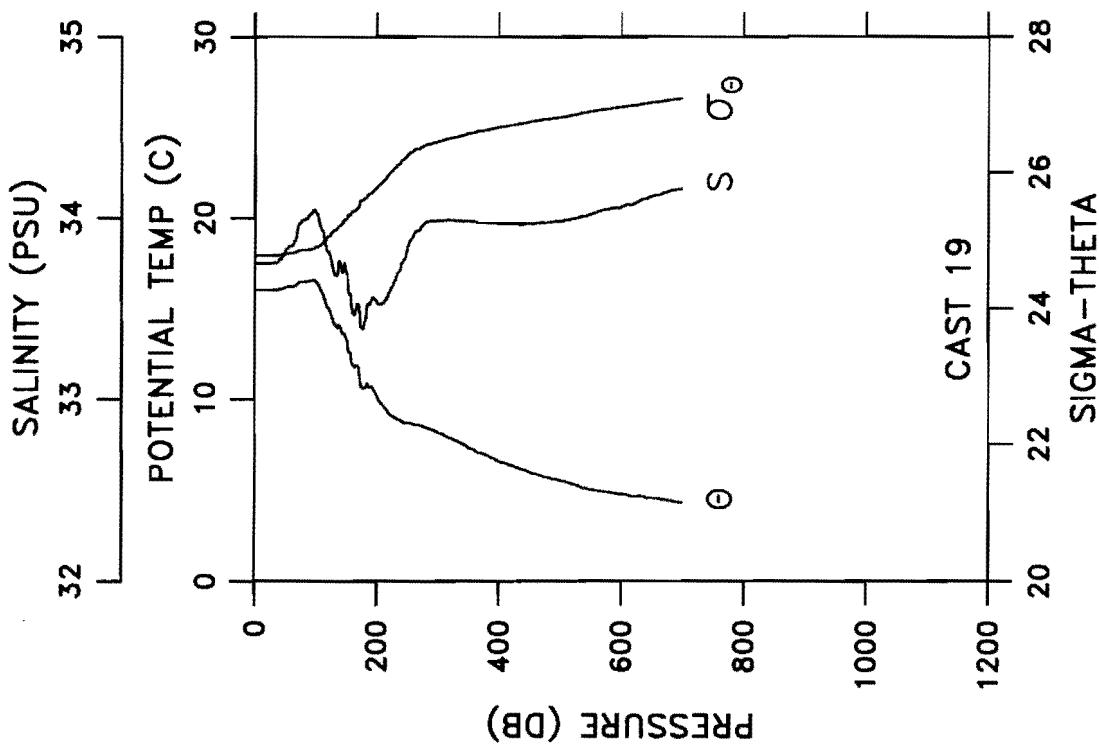


CAST CG1-91-DI -019 DATE 24 FEB 91 TIME 0740 GMT
LAT 35 00.1N LONG 135 00.1W

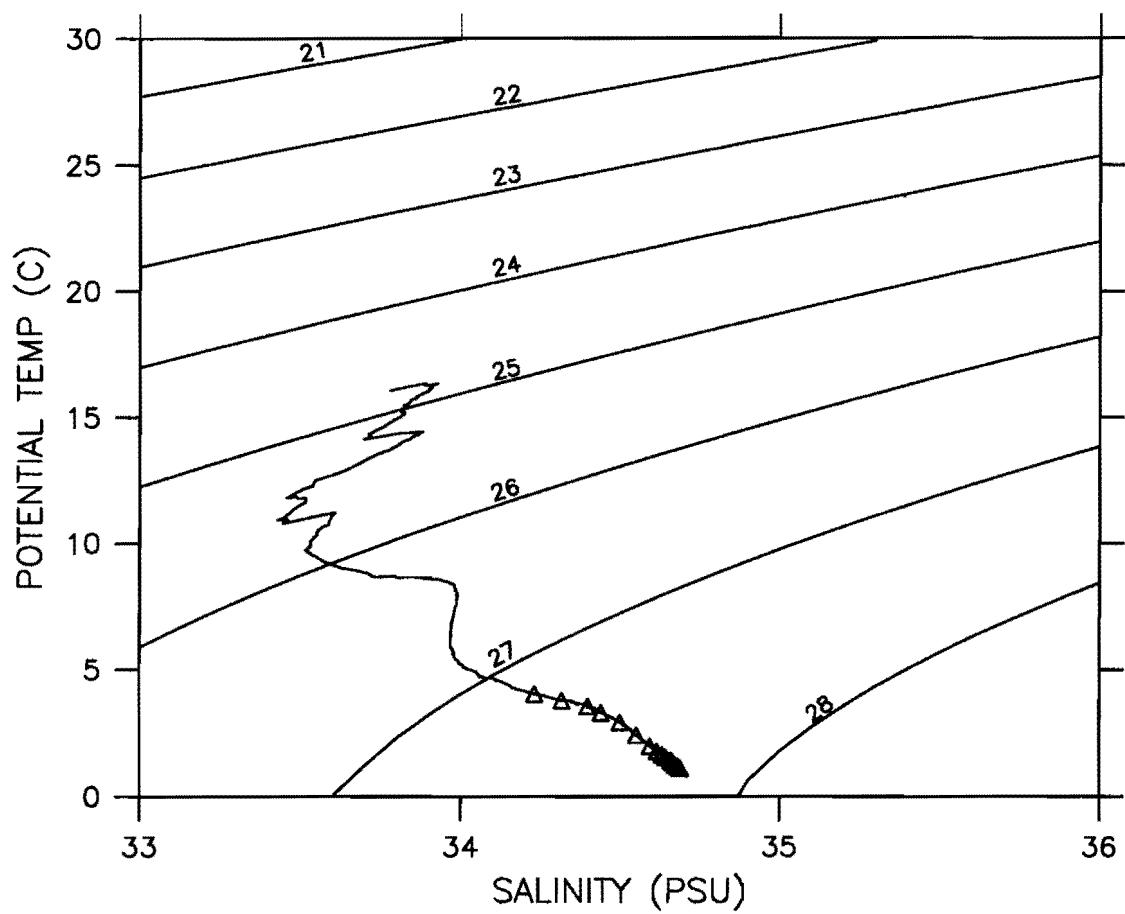


CAST CG1-91-DI-019 DATE 24 FEB 91 TIME 0740 GMT
 LAT 35 00.1N LONG 135 00.1W WEATHER 2 SEA STATE 3
 BAROMETER 03 WIND DIR 090 T SPD 15 KT VISIBILITY 8
 CLOUD 7 AMOUNT 6 DRY 14.6 WET 12.4 DEPTH 5213 M

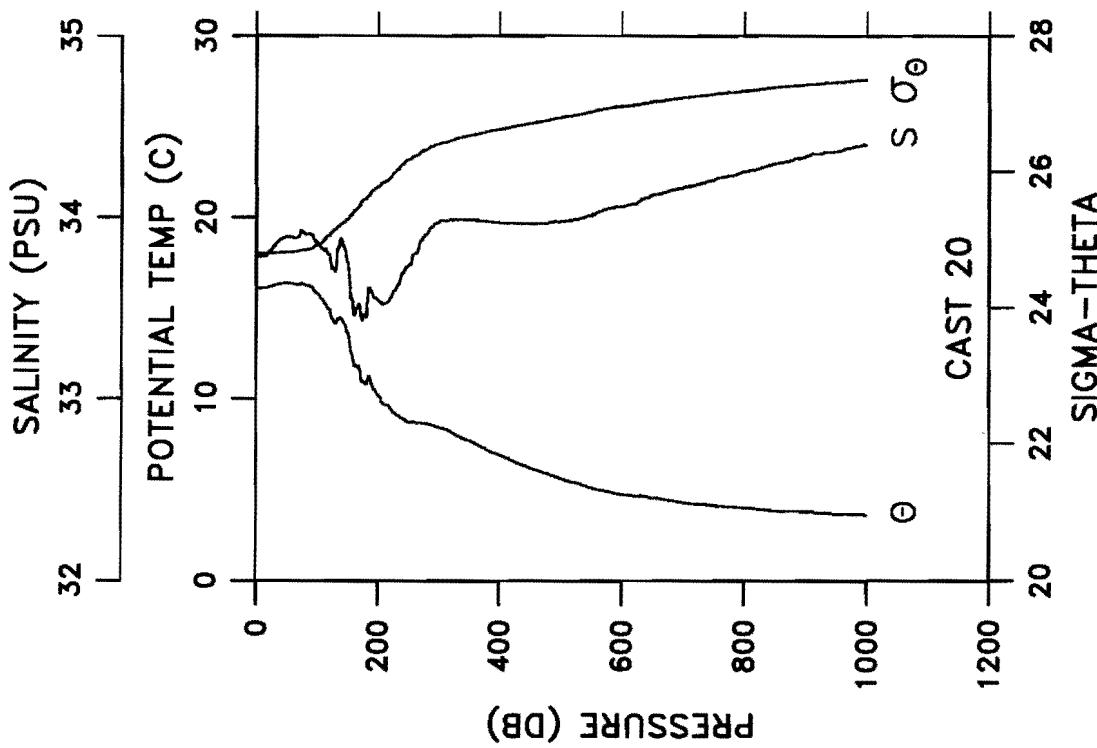
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	16.012	33.749	24.784	0.000
10	16.010	33.749	24.784	0.032
20	16.012	33.749	24.783	0.063
30	16.021	33.752	24.784	0.095
40	16.067	33.773	24.790	0.126
50	16.164	33.822	24.805	0.158
60	16.197	33.846	24.816	0.189
70	16.379	33.937	24.844	0.221
80	16.476	33.988	24.861	0.252
90	16.522	34.013	24.869	0.283
100	16.432	34.036	24.908	0.314
110	15.895	33.935	24.953	0.344
120	15.041	33.812	25.048	0.374
130	14.148	33.696	25.149	0.403
140	13.999	33.749	25.222	0.431
150	13.365	33.703	25.315	0.459
160	11.895	33.477	25.426	0.485
170	11.753	33.521	25.487	0.511
180	10.640	33.429	25.616	0.535
190	10.683	33.534	25.691	0.559
200	10.187	33.537	25.778	0.582
250	8.695	33.825	26.246	0.683
300	8.175	33.985	26.451	0.768
350	7.310	33.983	26.575	0.846
400	6.573	33.969	26.664	0.920
450	5.968	33.967	26.741	0.989
500	5.515	33.980	26.806	1.055
550	5.017	34.021	26.897	1.118
600	4.780	34.061	26.955	1.177
650	4.560	34.119	27.026	1.233
699	4.297	34.160	27.087	1.285



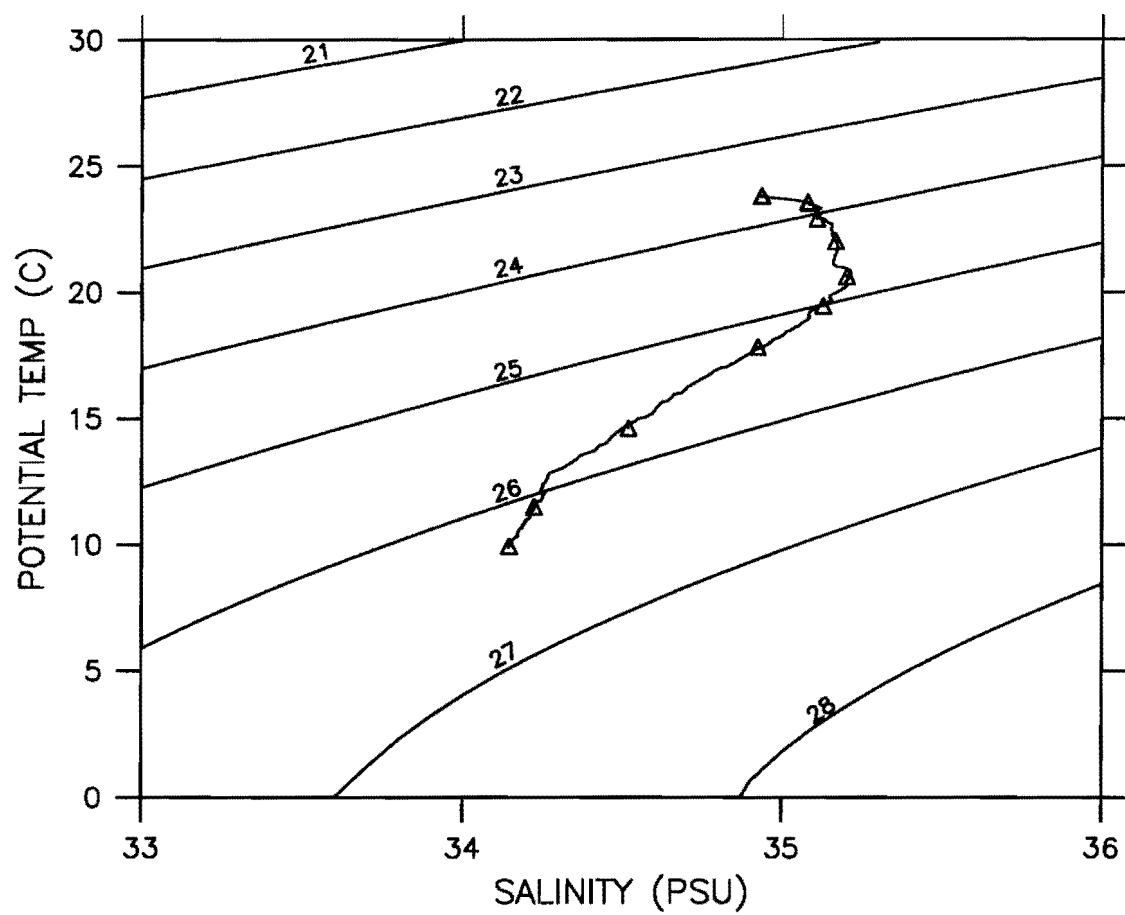
CAST CG1-91-DI -020 DATE 24 FEB 91 TIME 1151 GMT
LAT 35 00.1N LONG 135 00.1W



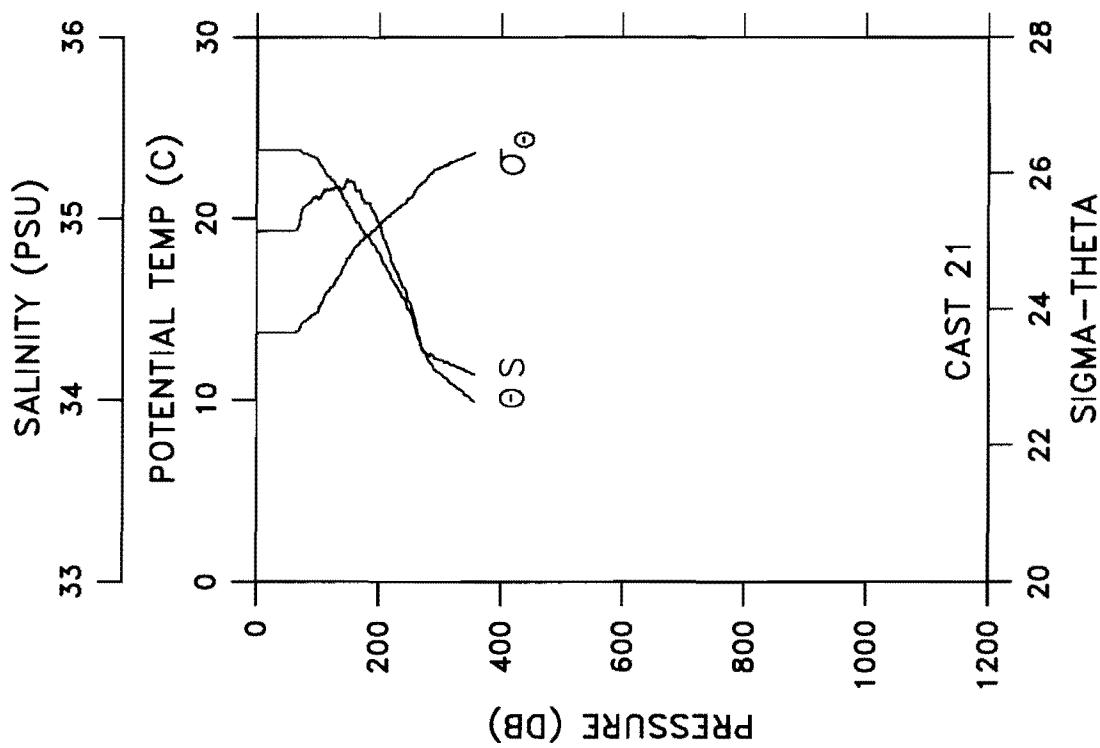
CAST CG1-91-DI -020		DATE 24 FEB 91		TIME 1151 GMT	
LAT 35 00.1N	LONG 135 00.1W	WEATHER 1	SEA STATE 2	VISIBILITY 8	
BAROMETER 20		WIND DIR 115 T	SPD 05 KT	DEPTH 5203 M	
CLOUD 6	AMOUNT 4	DRY 13.9	WET 11.5		
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	16.065	33.780	24.796	0.000	
10	16.082	33.786	24.796	0.031	
20	16.133	33.805	24.799	0.063	
30	16.227	33.838	24.803	0.094	
40	16.324	33.881	24.814	0.126	
50	16.346	33.892	24.818	0.157	
60	16.325	33.891	24.821	0.189	
70	16.272	33.891	24.834	0.220	
80	16.244	33.907	24.852	0.251	
90	16.162	33.905	24.869	0.282	
100	15.809	33.864	24.918	0.313	
110	15.360	33.825	24.988	0.345	
120	14.920	33.793	25.060	0.373	
130	14.140	33.698	25.152	0.401	
140	14.385	33.874	25.237	0.429	
150	13.581	33.749	25.307	0.457	
160	11.838	33.463	25.426	0.483	
170	11.618	33.513	25.506	0.509	
180	10.820	33.449	25.600	0.533	
190	10.735	33.588	25.724	0.557	
200	10.258	33.542	25.774	0.580	
250	8.688	33.728	26.171	0.683	
300	8.426	33.970	26.401	0.772	
350	7.678	33.986	26.525	0.852	
400	6.912	33.973	26.622	0.928	
450	6.171	33.968	26.716	0.999	
500	5.625	33.977	26.791	1.067	
550	5.106	34.008	26.876	1.130	
600	4.728	34.057	26.958	1.189	
650	4.555	34.123	27.030	1.246	
700	4.292	34.164	27.091	1.299	
750	4.146	34.204	27.138	1.349	
800	4.001	34.251	27.190	1.398	
900	3.767	34.334	27.281	1.488	
1000	3.571	34.396	27.349	1.571	
1500	2.540	34.539	27.558	1.920	
2000	1.853	34.607	27.668	2.198	
2500	1.556	34.640	27.717	2.443	
3000	1.357	34.660	27.747	2.673	
3500	1.241	34.672	27.765	2.898	
4000	1.167	34.682	27.778	3.122	
4500	1.136	34.684	27.782	3.352	
5000	1.120	34.686	27.785	3.590	
5270	1.117	34.685	27.785	3.723	



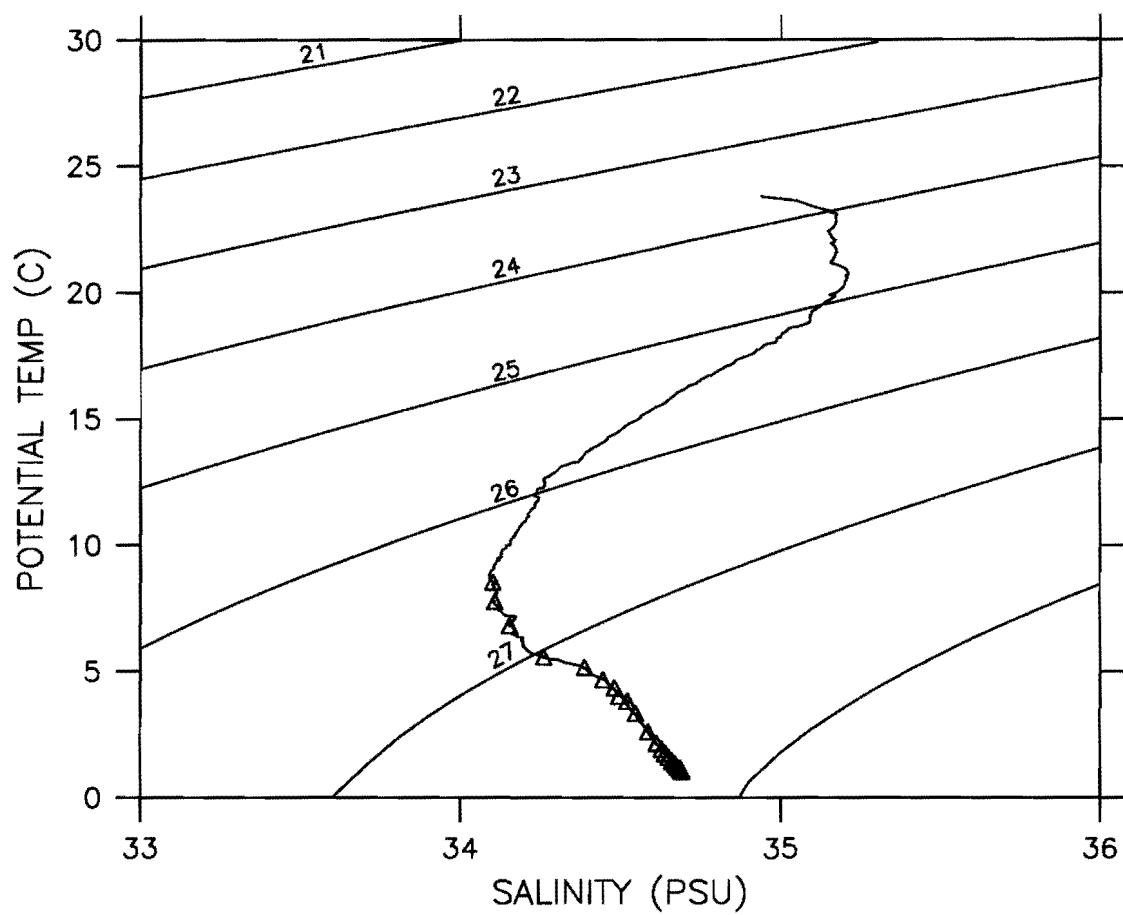
CAST CG1-91-DI -021 DATE 28 FEB 91 TIME 2010 GMT
LAT 21 20.0N LONG 152 49.6W



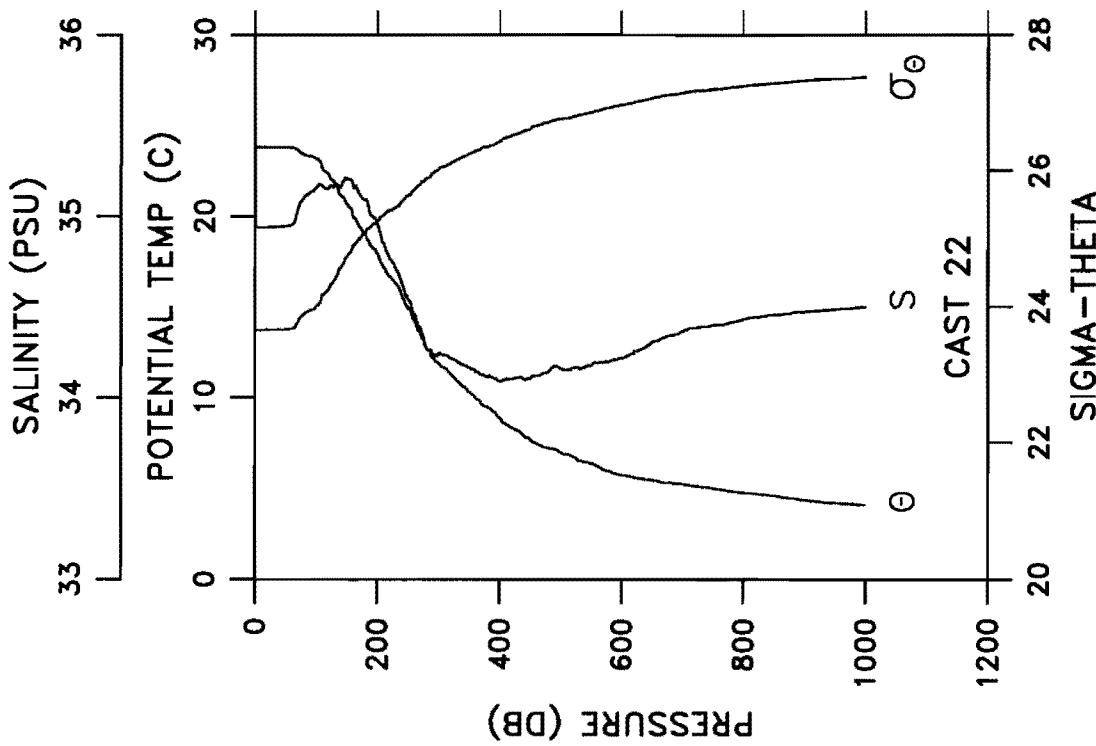
CAST CG1-91-DI -021 DATE 28 FEB 91 TIME 2010 GMT
 LAT 21 20.0N LONG 152 49.6W WEATHER 1 SEA STATE 4
 BAROMETER 13 WIND DIR 300 T SPD 20 KT VISIBILITY 8
 CLOUD 4 AMOUNT 6 DRY 23.3 WET 19.4 DEPTH 5255 M



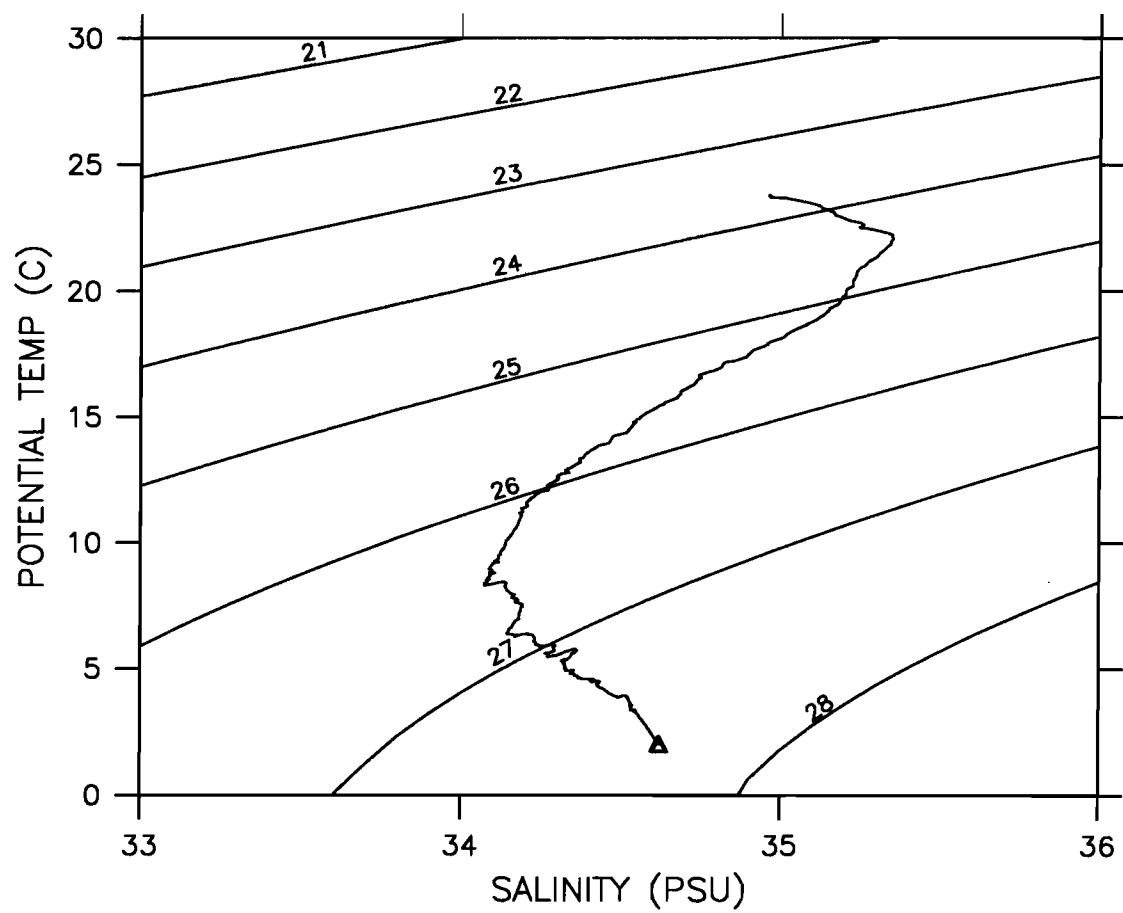
CAST CG1-91-DI -022 DATE 28 FEB 91 TIME 2333 GMT
LAT 21 20.1N LONG 152 50.6W



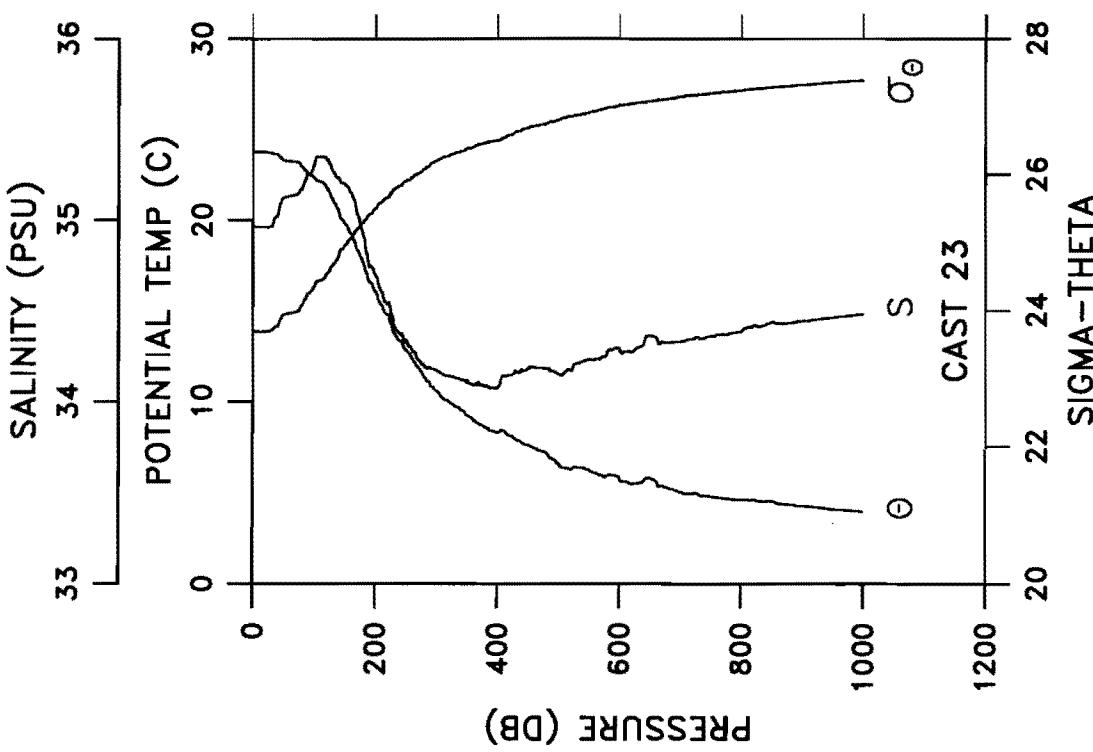
CAST CG1-91-DI -022		DATE 28 FEB 91		TIME 2333 GMT	
LAT 21 20.1N	LONG 152 50.6W	WEATHER 1	SEA STATE 4		
BAROMETER 112	WIND DIR 310 T	SPD 14 KT	VISIBILITY 8		
CLOUD 6	AMOUNT 6	DRY 23.0	WET 19.6	DEPTH 5249 M	
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DN-M)	
0	23.799	34.939	23.856	0.000	
10	23.797	34.940	23.857	0.042	
20	23.790	34.940	23.859	0.085	
30	23.772	34.940	23.865	0.127	
40	23.772	34.942	23.867	0.169	
50	23.770	34.946	23.870	0.212	
60	23.760	34.953	23.878	0.254	
70	23.639	35.039	23.779	0.296	
80	23.403	35.099	23.894	0.337	
90	23.307	35.126	23.942	0.377	
100	23.144	35.156	24.012	0.417	
110	22.806	35.165	24.173	0.456	
120	22.332	35.151	24.241	0.493	
130	21.829	35.168	24.395	0.529	
140	21.148	35.156	24.574	0.564	
150	20.675	35.202	24.737	0.598	
160	19.986	35.173	24.899	0.630	
170	19.458	35.124	24.999	0.660	
180	19.037	35.080	25.081	0.690	
190	18.336	35.003	25.192	0.719	
200	17.958	34.957	25.251	0.747	
250	14.907	34.541	25.639	0.877	
300	11.888	34.243	26.023	0.888	
350	10.316	34.164	26.245	1.086	
400	8.853	34.091	26.430	1.174	
450	7.720	34.103	26.611	1.252	
500	6.978	34.160	26.760	1.323	
550	6.338	34.176	26.859	1.388	
600	5.719	34.218	26.970	1.448	
650	5.444	34.307	27.074	1.504	
700	5.240	34.366	27.145	1.555	
750	5.008	34.398	27.197	1.604	
800	4.764	34.433	27.253	1.650	
900	4.379	34.470	27.325	1.737	
1000	4.088	34.499	27.378	1.818	
1500	2.774	34.576	27.567	2.164	
2000	2.032	34.618	27.683	2.448	
2500	1.632	34.646	27.716	2.698	
3000	1.383	34.665	27.750	2.930	
3500	1.233	34.676	27.770	3.154	
4000	1.139	34.684	27.782	3.376	
4500	1.087	34.687	27.788	3.602	
5000	1.043	34.690	27.794	3.833	
5329	1.036	34.691	27.794	3.989	



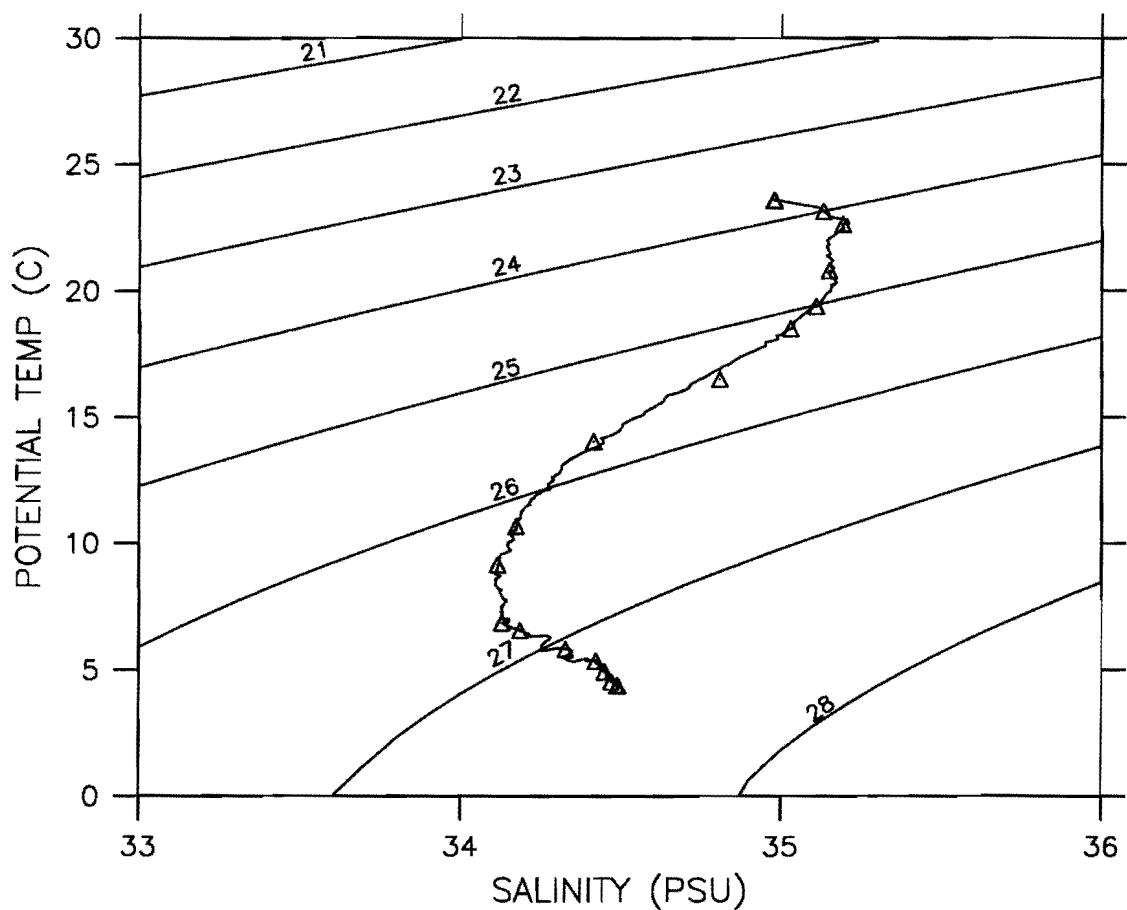
CAST CG1-91-DI -023 DATE 01 MAR 91 TIME 0915 GMT
LAT 20 55.1N LONG 153 47.5W



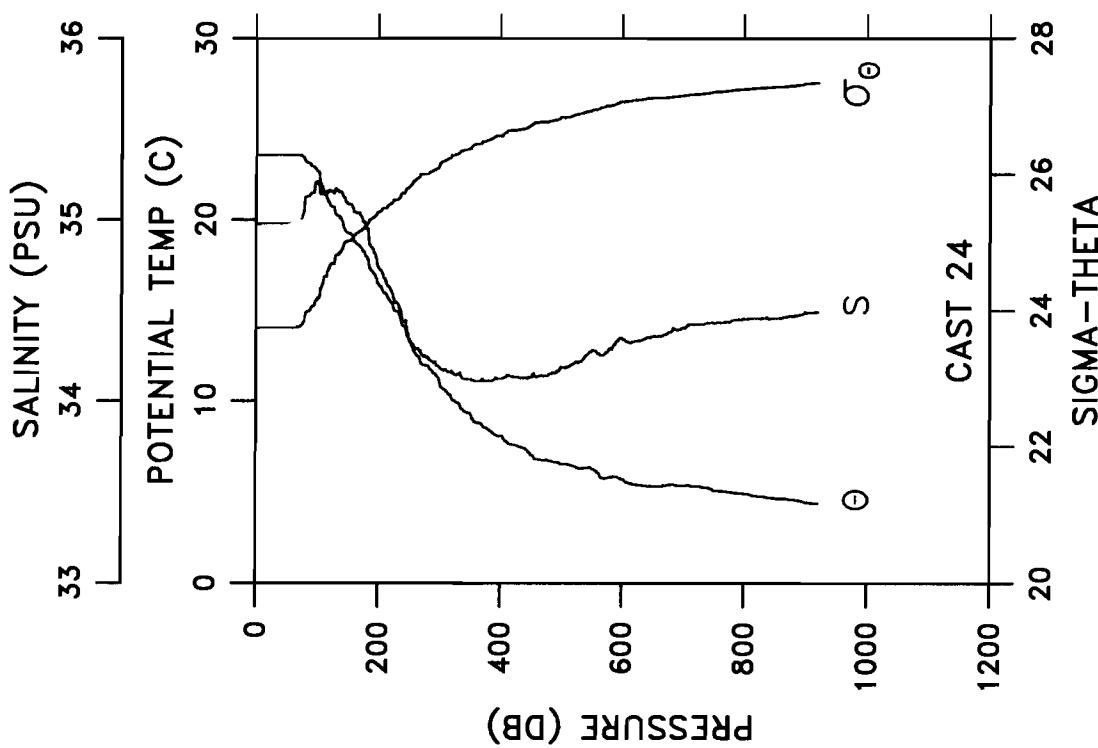
CAST CG1-91-DI -023 DATE 01 MAR 91 TIME 0915 GMT
 LAT 20 55.1 N LONG 153 47.5 W WEATHER 1 SEA STATE 2
 BAROMETER 13 WIND DIR 260 T SPD 08 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 21.9 WET 18.6 DEPTH 5235 M



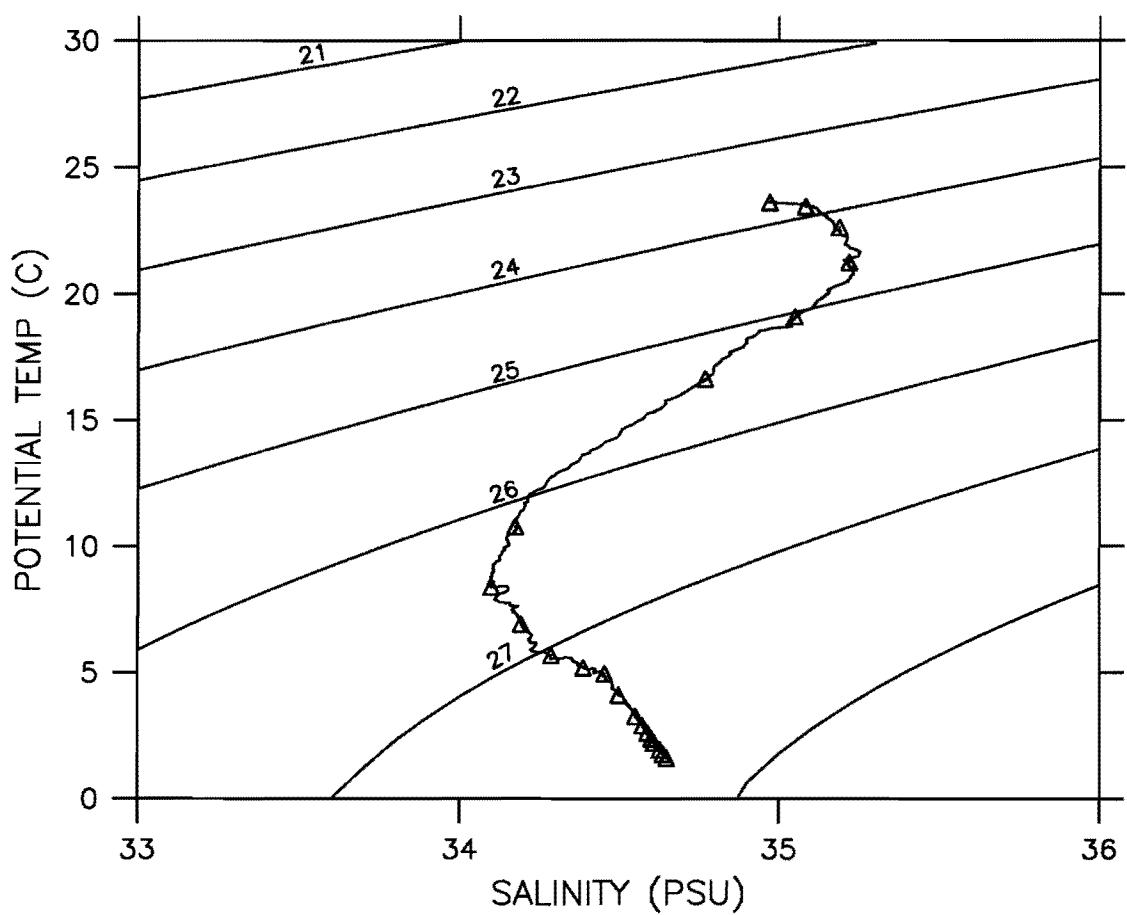
CAST CG2-91-DI -024 DATE 08 MAR 91 TIME 0402 GMT
LAT 19 53.3N LONG 154 55.3W



CAST CG2-91-DI -024 DATE 08 MAR 91 TIME 0402 GMT
 LAT 19 53.5N LONG 154 55.3W WEATHER 1 SEA STATE 3
 BAROMETER 18 WIND DIR 040 T SPD 14 KT VISIBILITY 8
 CLOUD 6 AMOUNT 5 DRY 21.7 WET 18.1 DEPTH 0962 M

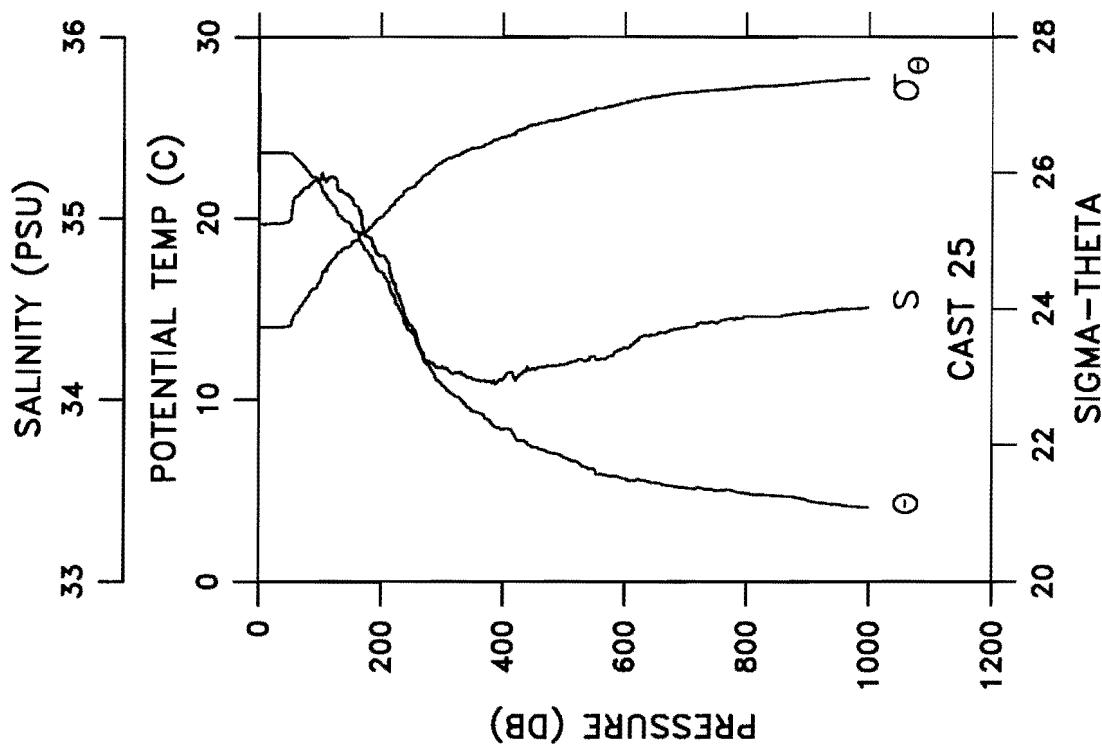


CAST CG2-91-DI -025 DATE 08 MAR 91 TIME 0831 GMT
LAT 20 04.0N LONG 154 40.5W

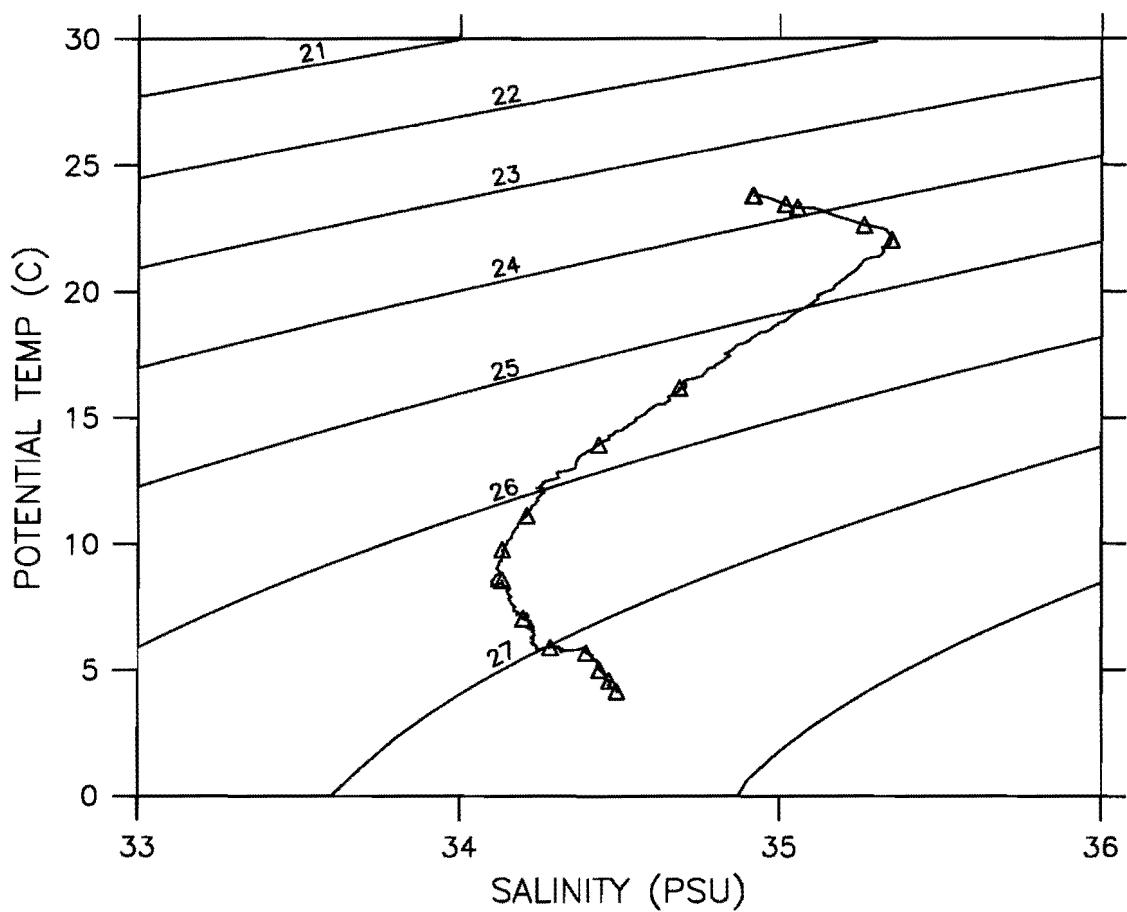


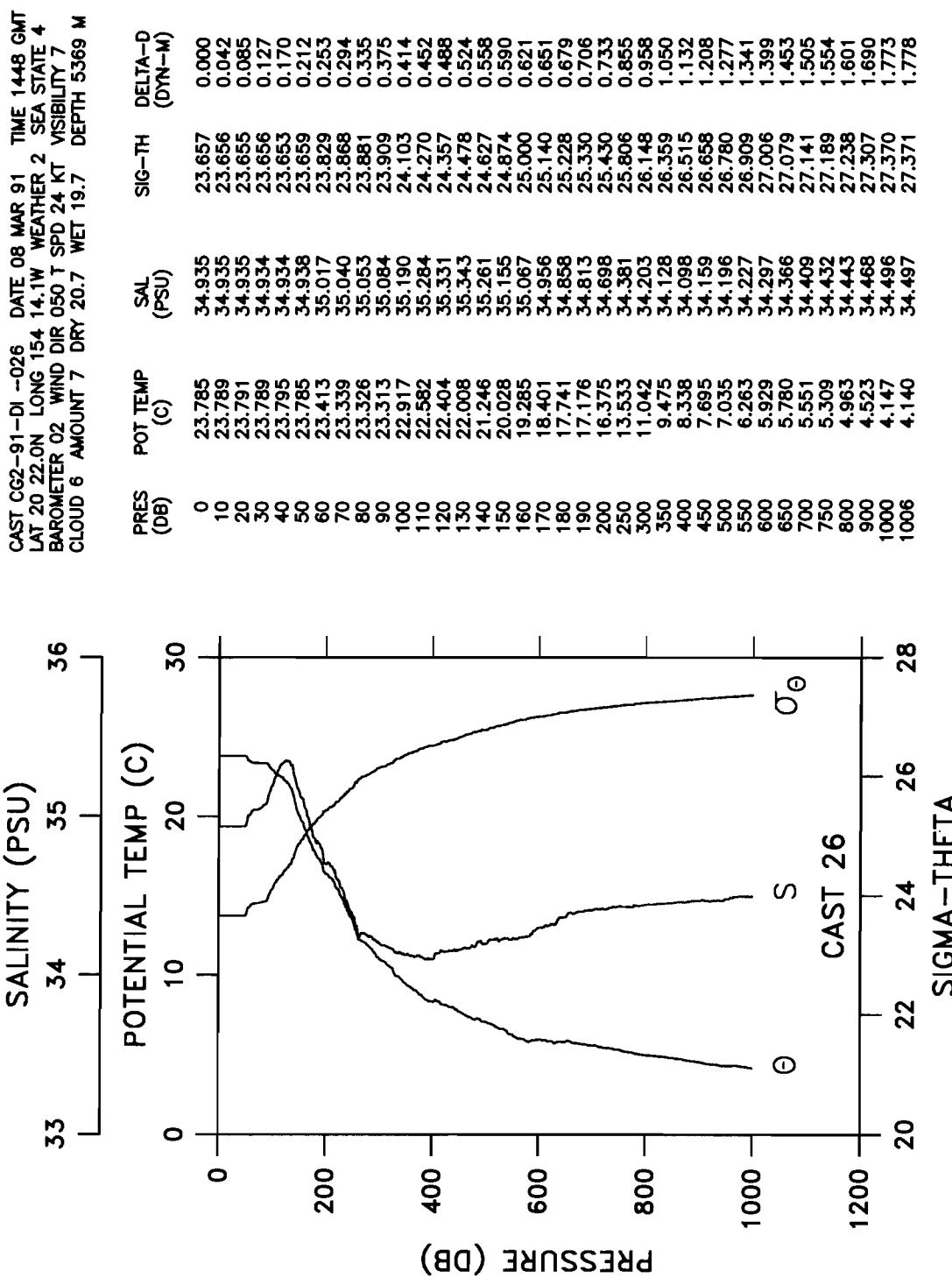
CAST CG2-91-DI -025	DATE 08 MAR 91	TIME 0831 GMT
LAT 20 04.0N LONG 154 40.5W	WEATHER 1	SEA STATE 4
BAROMETER 19	SPD 17 KT	VISIBILITY 8
CLOUD 0 AMOUNT 1	DRY 27.8	WET 18.8 DEPTH 2531 M

PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	23.617	34.972	23.735	0.000
10	23.625	34.969	23.730	0.042
20	23.623	34.969	23.731	0.083
30	23.625	34.972	23.732	0.125
40	23.623	34.974	23.735	0.167
50	23.599	34.989	23.753	0.208
60	23.293	35.121	23.942	0.249
70	23.005	35.146	24.045	0.288
80	22.557	35.172	24.193	0.327
90	22.275	35.205	24.297	0.363
100	21.912	35.211	24.404	0.400
110	21.329	35.199	24.557	0.434
120	20.804	35.232	24.725	0.467
130	20.174	35.152	24.833	0.499
140	19.881	35.137	24.899	0.531
150	19.690	35.115	24.932	0.562
160	19.260	35.068	25.008	0.592
170	18.539	34.951	25.101	0.621
180	18.046	34.898	25.184	0.650
190	17.435	34.827	25.278	0.678
200	17.062	34.794	25.343	0.705
250	13.713	34.407	25.789	0.828
300	10.799	34.184	26.177	0.933
350	9.380	34.115	26.364	1.023
400	8.359	34.110	26.521	1.106
450	7.384	34.171	26.712	1.181
500	6.828	34.194	26.898	1.249
550	6.162	34.238	26.930	1.311
600	5.658	34.286	27.031	1.368
650	5.415	34.358	27.117	1.421
700	5.132	34.398	27.182	1.470
750	4.975	34.420	27.219	1.518
800	4.825	34.457	27.265	1.563
900	4.454	34.480	27.324	1.651
1000	4.065	34.507	27.398	1.731
1500	2.754	34.583	27.575	2.074
2000	2.062	34.620	27.663	2.358
2500	1.615	34.651	27.721	2.606
2519	1.610	34.651	27.722	2.615

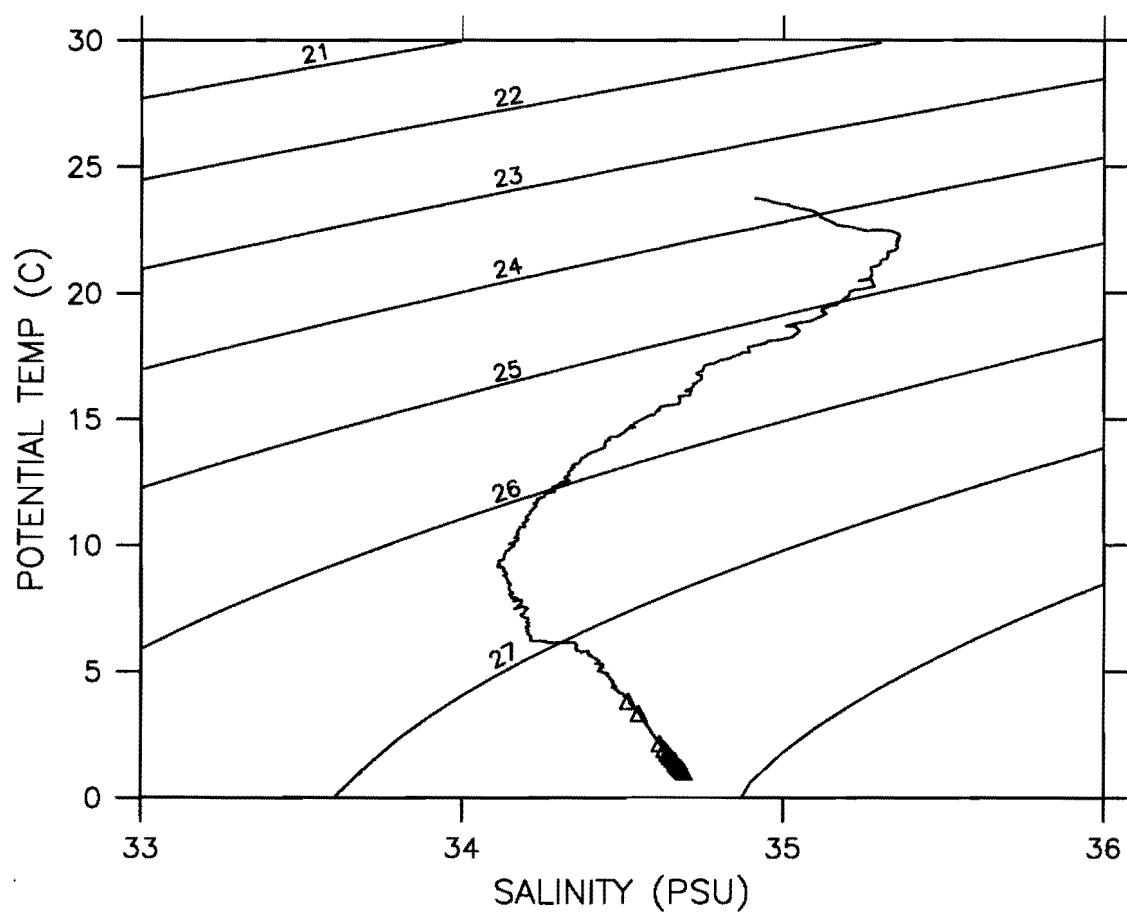


CAST CG2-91-DI -026 DATE 08 MAR 91 TIME 1448 GMT
LAT 20 22.0N LONG 154 14.1W

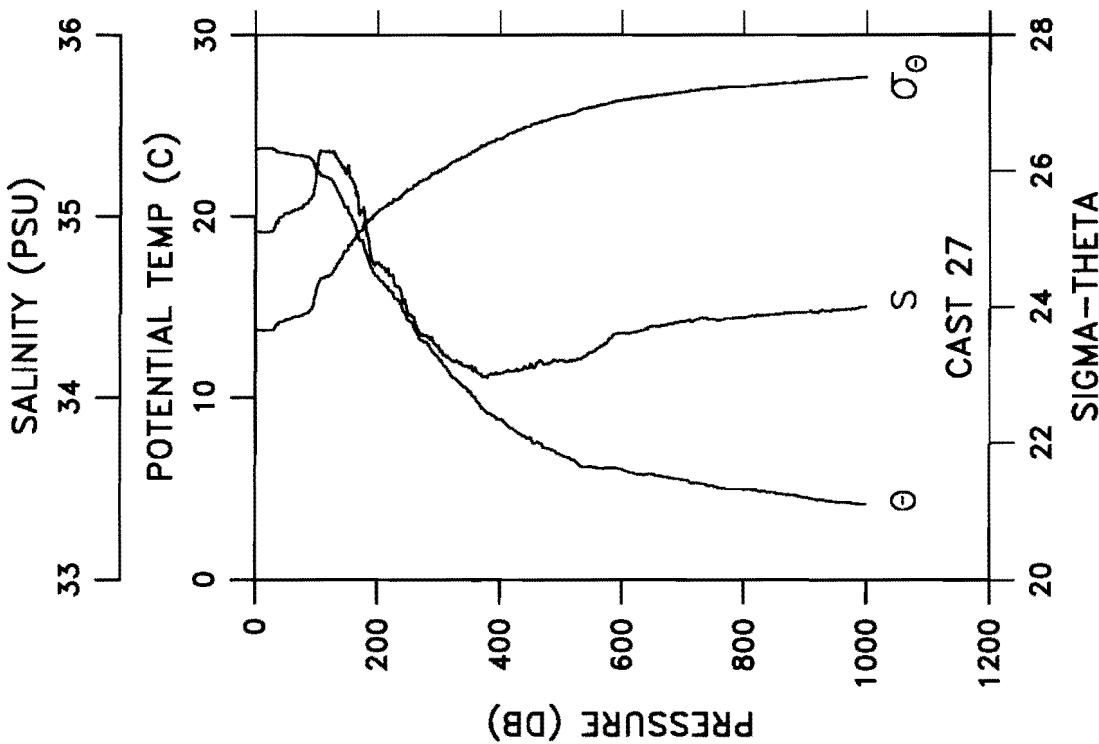




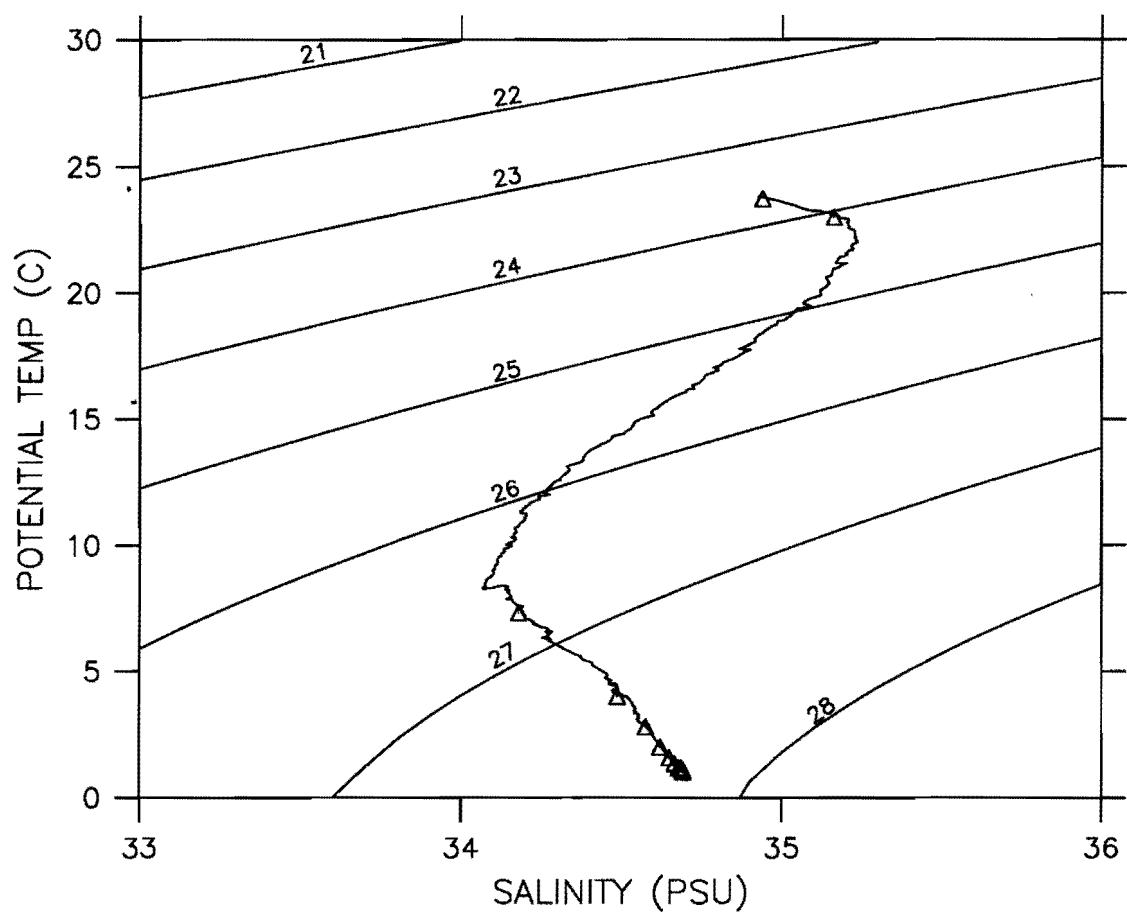
CAST CG2-91-DI -027 DATE 08 MAR 91 TIME 1948 GMT
LAT 20 23.8N LONG 154 14.2W



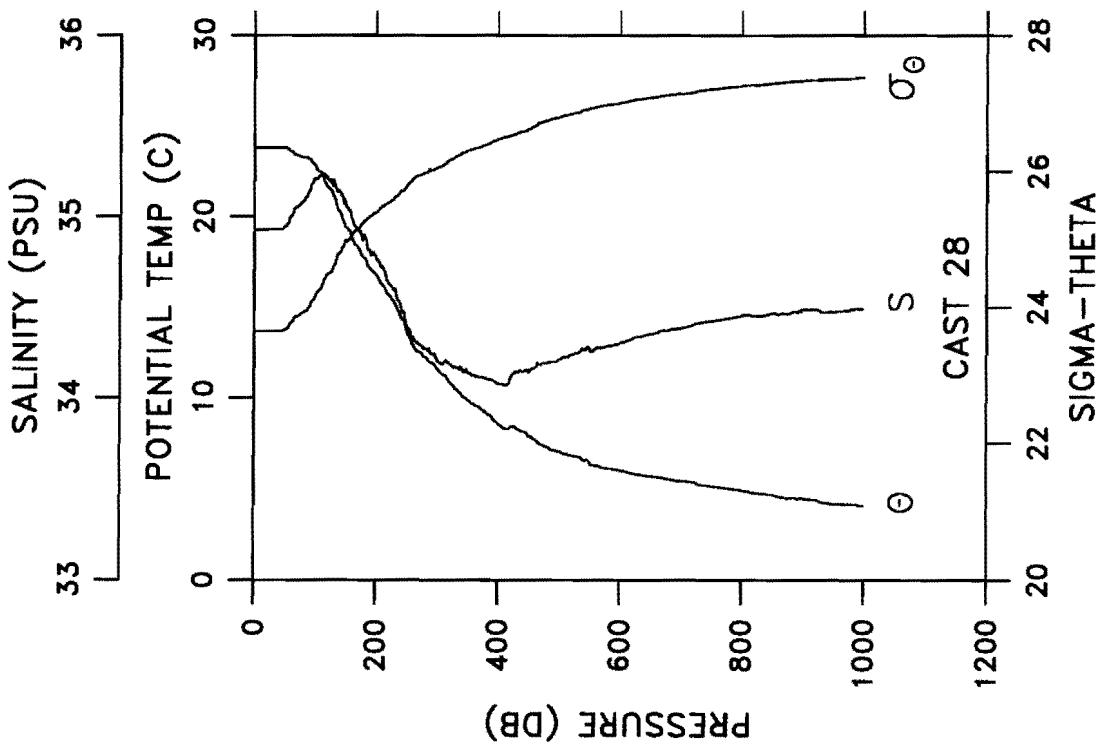
CAST CG2-91-01 -027		DATE 08 MAR 91		TIME 1948 GMT	
LAT 20 23.8N	LONG 154 14.2W	WEATHER 1	SEA STATE 4		
BAROMETER 17		WIND DIR 045 T	SPD 20 KT	VISIBILITY 8	
CLOUD 6		AMOUNT 3	DRY 21.1	WET 19.8	DEPTH 5455 M
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	23.726	34.914	23.659	0.000	
10	23.736	34.913	23.655	0.042	
20	23.737	34.913	23.654	0.085	
30	23.724	34.923	23.666	0.127	
40	23.504	34.993	23.783	0.169	
50	23.473	35.018	23.811	0.210	
60	23.412	35.029	23.838	0.251	
70	23.355	35.040	23.863	0.292	
80	23.295	35.066	23.900	0.332	
90	23.176	35.097	23.958	0.372	
100	22.448	35.259	24.289	0.411	
110	22.232	35.358	24.426	0.447	
120	22.095	35.360	24.466	0.482	
130	21.675	35.344	24.572	0.517	
140	21.029	35.282	24.702	0.550	
150	20.502	35.260	24.828	0.583	
160	19.766	35.188	24.988	0.614	
170	18.674	35.007	25.110	0.643	
180	18.088	34.951	25.214	0.672	
190	17.171	34.765	25.294	0.700	
200	16.694	34.744	25.391	0.726	
250	14.278	34.462	25.713	0.851	
300	12.094	34.289	26.019	0.961	
350	10.323	34.167	26.246	1.059	
400	8.793	34.132	26.472	1.145	
450	7.813	34.187	26.663	1.221	
500	6.851	34.205	26.813	1.290	
550	6.196	34.248	26.933	1.352	
600	6.044	34.354	27.037	1.409	
650	5.781	34.393	27.101	1.462	
700	5.460	34.418	27.160	1.513	
750	5.128	34.433	27.211	1.561	
800	4.944	34.442	27.240	1.607	
900	4.514	34.471	27.311	1.696	
1000	4.125	34.502	27.377	1.778	
1500	2.861	34.577	27.560	2.129	
2000	2.022	34.625	27.669	2.412	
2500	1.626	34.652	27.721	2.658	
3000	1.403	34.665	27.748	2.889	
3500	1.250	34.677	27.768	3.114	
4000	1.145	34.684	27.782	3.337	
4500	1.102	34.688	27.788	3.563	
5000	1.053	34.691	27.794	3.795	
5215	1.027	34.693	27.797	3.897	



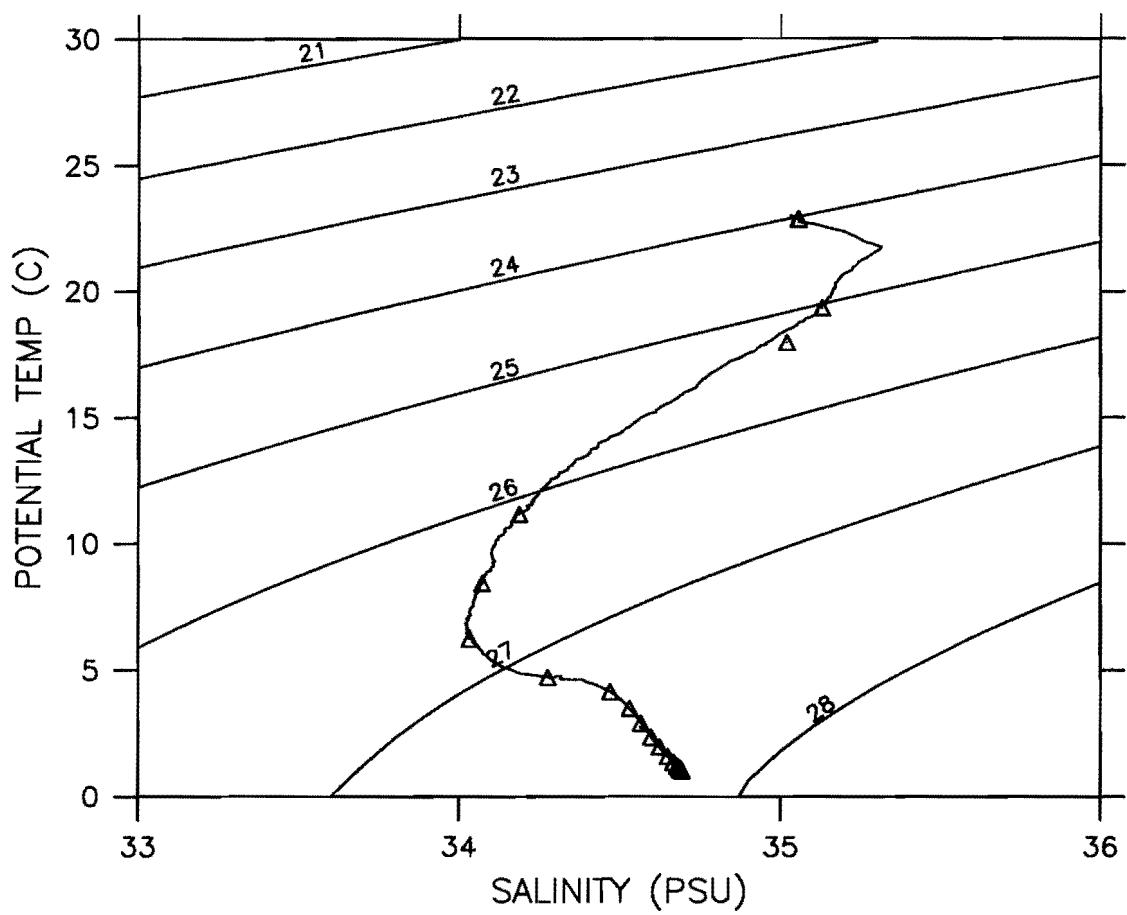
CAST CG2-91-DI -028 DATE 09 MAR 91 TIME 0411 GMT
LAT 20 42.4N LONG 153 46.0W



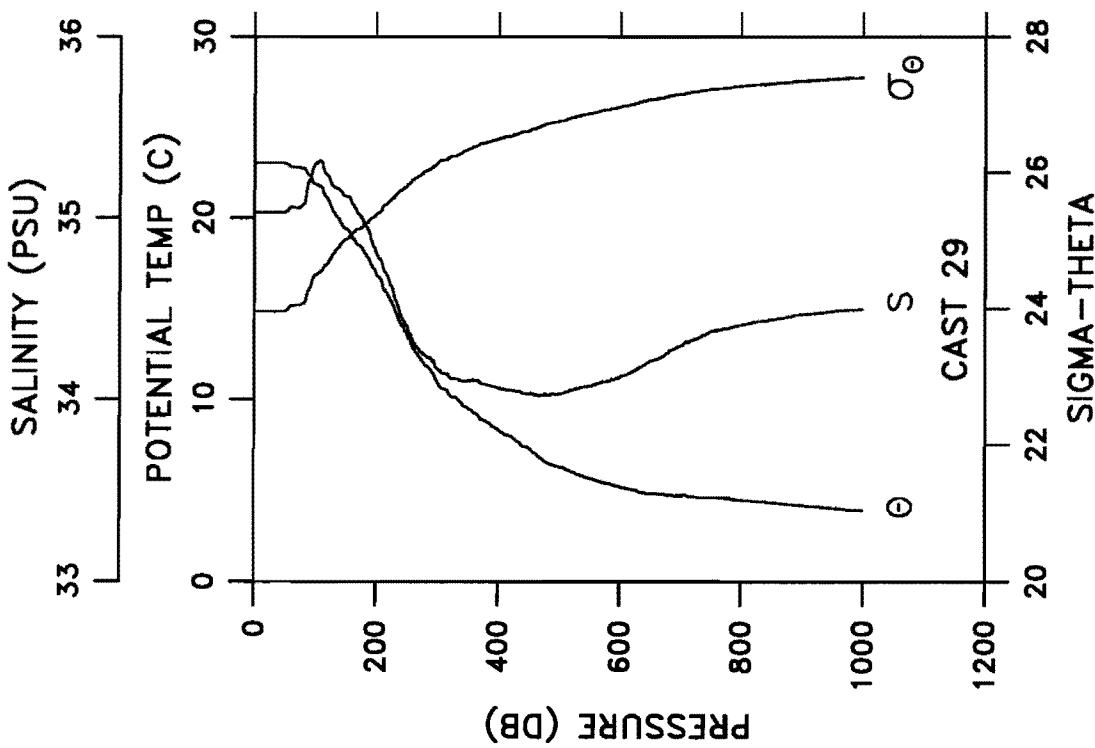
CAST CG2-91-DI -028		DATE 09 MAR 91		TIME 0411 GMT	
LAT 20 42.4N	LONG 153 46.0W	WEATHER 5	SEA STATE 5		
BAROMETER 14	WIND DIR 080 T	SPD 30 KT			
CLOUD 6	AMOUNT 7	DRY 21.3	WET 20.2	DEPTH 5064 M	
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	23.802	34.927	23.646	0.000	
10	23.802	34.927	23.646	0.042	
20	23.802	34.927	23.646	0.085	
30	23.801	34.928	23.648	0.127	
40	23.801	34.927	23.647	0.170	
50	23.773	34.942	23.666	0.212	
60	23.588	34.998	23.763	0.254	
70	23.384	35.051	23.863	0.295	
80	23.269	35.082	23.920	0.336	
90	23.169	35.138	23.991	0.376	
100	22.780	35.204	24.153	0.414	
110	22.367	35.228	24.290	0.452	
120	21.657	35.209	24.474	0.487	
130	21.165	35.204	24.606	0.522	
140	20.262	35.141	24.801	0.555	
150	19.399	35.070	24.974	0.586	
160	18.867	34.988	25.047	0.616	
170	18.305	34.927	25.142	0.645	
180	17.721	34.902	25.266	0.673	
190	17.139	34.810	25.336	0.700	
200	16.793	34.772	25.389	0.727	
250	13.754	34.401	25.776	0.851	
300	11.616	34.212	26.050	0.957	
350	9.878	34.140	26.301	1.052	
400	8.540	34.079	26.470	1.138	
450	7.863	34.141	26.620	1.216	
500	7.047	34.213	26.792	1.286	
550	6.400	34.270	26.925	1.349	
600	6.020	34.302	26.999	1.407	
650	5.686	34.353	27.081	1.462	
700	5.431	34.385	27.137	1.514	
750	5.142	34.423	27.201	1.562	
800	4.913	34.453	27.252	1.609	
900	4.480	34.487	27.327	1.696	
1000	4.062	34.491	27.375	1.777	
1500	2.866	34.574	27.558	2.130	
2000	2.040	34.621	27.665	2.414	
2500	1.590	34.650	27.723	2.660	
3000	1.343	34.668	27.755	2.887	
3500	1.204	34.679	27.774	3.107	
4000	1.126	34.686	27.784	3.326	
4500	1.083	34.689	27.790	3.550	
5000	1.030	34.693	27.796	3.780	
5075	1.020	34.694	27.798	3.814	



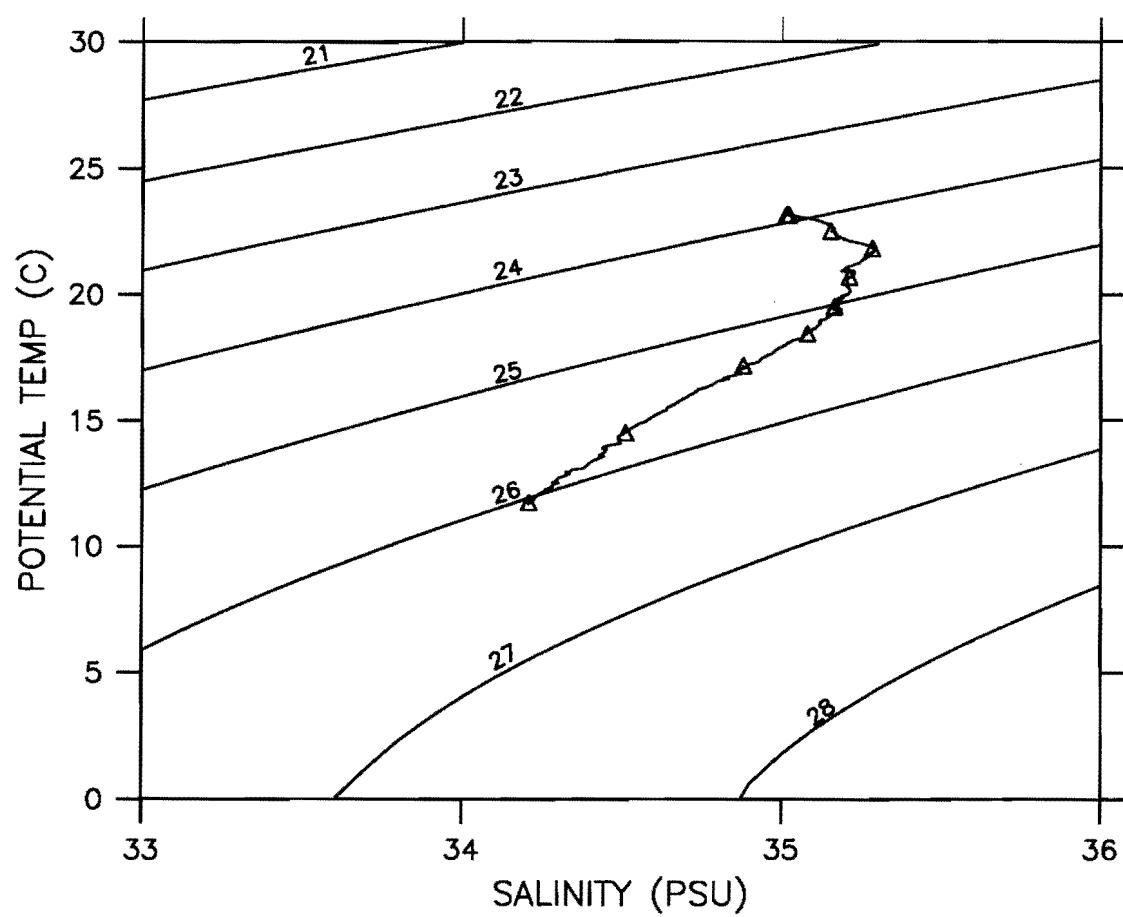
CAST CG2-91-DI -029 DATE 10 MAR 91 TIME 0521 GMT
LAT 21 36.8N LONG 152 26.2W



CAST CG2-91-DI -029		DATE 10 MAR 91		TIME 0521 GMT		SEA STATE 8	
LAT 21 36.8N LONG 152 26.2W		WEATHER 1					
BAROMETER 17 WIND DIR 065 T SPD 25 KT		VISIBILITY 9					
CLOUD 3 AMOUNT 1 DRY 21.0 WET 17.8		DEPTH 5339 M					
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)			
0	23.005	35.030	23.956	0.000			
10	23.011	35.030	23.955	0.039			
20	23.010	35.030	23.955	0.079			
30	23.013	35.030	23.954	0.119			
40	23.012	35.030	23.954	0.158			
50	23.003	35.031	23.958	0.198			
60	22.822	35.058	24.031	0.237			
70	22.769	35.056	24.044	0.276			
80	22.714	35.072	24.072	0.315			
90	22.338	35.203	24.278	0.353			
100	21.843	35.294	24.487	0.388			
110	21.667	35.310	24.547	0.423			
120	21.071	35.238	24.657	0.457			
130	20.331	35.169	24.804	0.489			
140	19.889	35.157	24.912	0.521			
150	19.387	35.121	25.016	0.551			
160	18.939	35.082	25.101	0.580			
170	18.499	35.024	25.167	0.609			
180	18.053	34.970	25.237	0.638			
190	17.560	34.901	25.305	0.665			
200	16.935	34.807	25.383	0.692			
250	13.640	34.408	25.805	0.814			
300	10.949	34.170	26.139	0.919			
350	9.492	34.105	26.338	1.011			
400	8.290	34.065	26.496	1.095			
450	7.336	34.034	26.611	1.172			
500	6.280	34.033	26.753	1.243			
550	5.657	34.075	26.865	1.308			
600	5.204	34.123	26.956	1.368			
650	4.824	34.213	27.072	1.423			
700	4.703	34.297	27.152	1.474			
750	4.613	34.376	27.224	1.522			
800	4.470	34.409	27.267	1.567			
900	4.173	34.467	27.344	1.652			
1000	3.893	34.496	27.396	1.731			
1500	2.732	34.576	27.571	2.072			
2000	1.951	34.624	27.674	2.348			
2500	1.588	34.650	27.723	2.591			
3000	1.344	34.669	27.756	2.819			
3500	1.204	34.681	27.775	3.039			
4000	1.126	34.686	27.785	3.259			
4500	1.071	34.691	27.792	3.482			
5000	1.033	34.692	27.796	3.711			
5384	1.019	34.694	27.798	3.893			

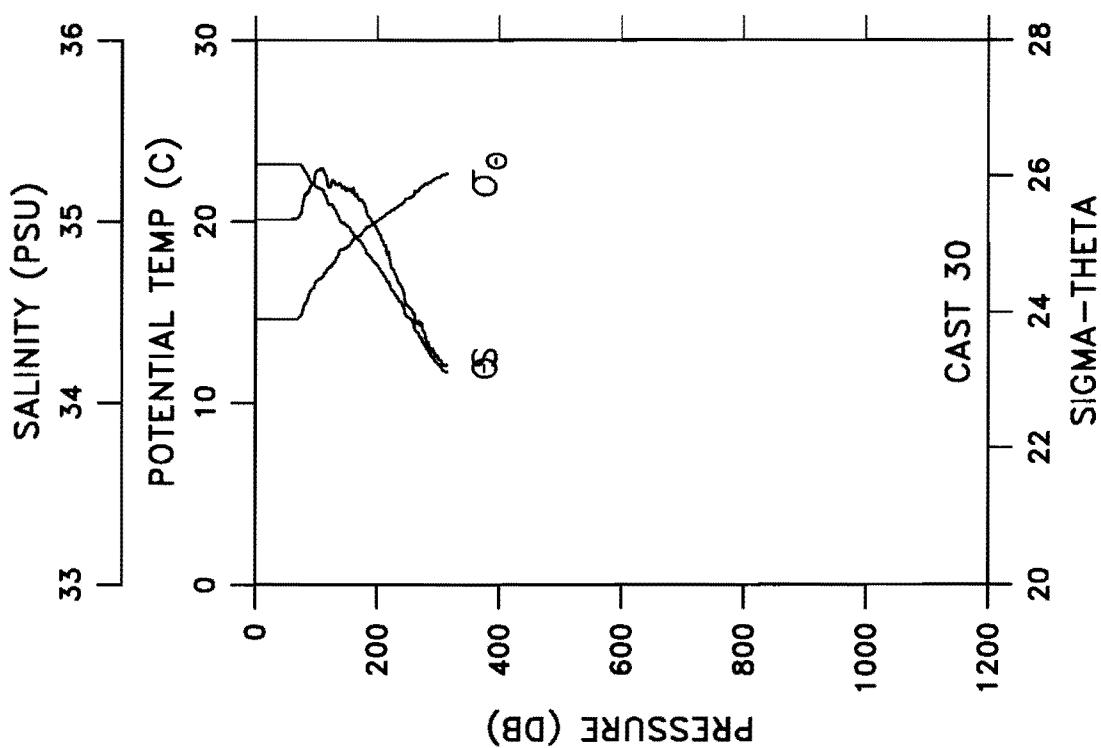


CAST CG2-91-DI -030 DATE 10 MAR 91 TIME 1310 GMT
LAT 21 54.9N LONG 152 00.2W

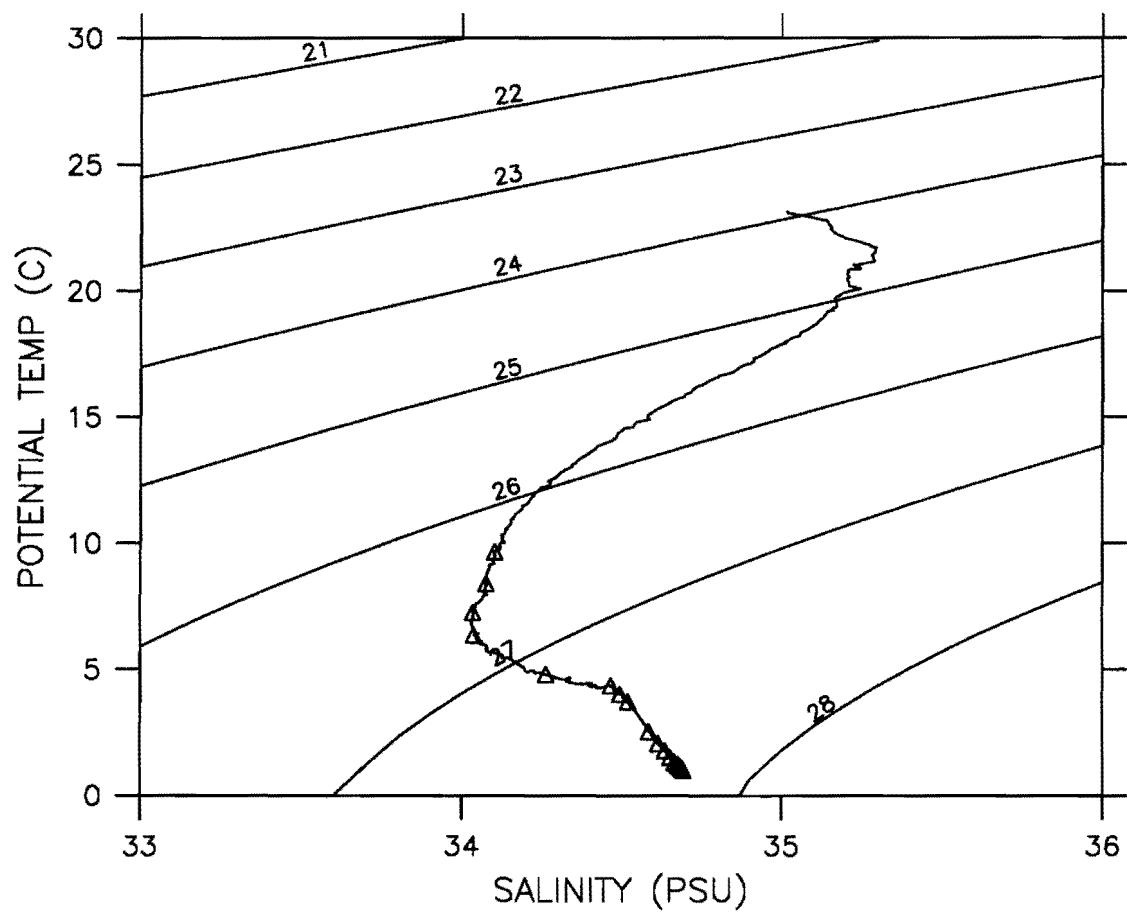


CAST CG2-91-DI-030 DATE 10 MAR 91 TIME 1310 GMT
 LAT 21 54.9N LONG 152 00.2W WEATHER 1 SEA STATE 5
 BAROMETER 18 WIND DIR 075 T SPD 23 KT VISIBILITY 8
 CLOUD 0 AMOUNT 6 DRY 19.8 WET 17.8 DEPTH 5691 M

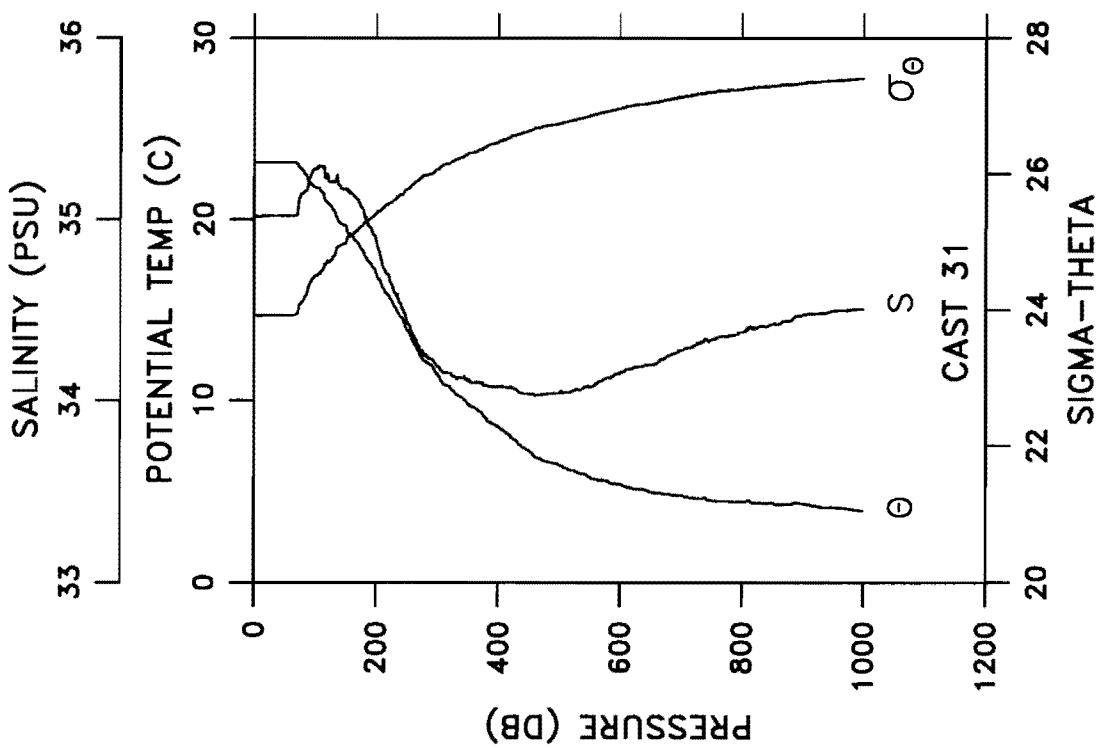
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	23.153	35.012	23.900	0.000
10	23.155	35.012	23.900	0.040
20	23.164	35.012	23.897	0.080
30	23.162	35.013	23.898	0.120
40	23.159	35.012	23.899	0.160
50	23.159	35.013	23.899	0.200
60	23.158	35.013	23.899	0.241
70	23.147	35.021	23.908	0.281
80	22.851	35.128	24.075	0.320
90	22.192	35.194	24.313	0.358
100	21.898	35.277	24.458	0.394
110	21.756	35.292	24.510	0.429
120	20.936	35.188	24.656	0.463
130	20.674	35.214	24.746	0.496
140	19.986	35.202	24.920	0.527
150	19.809	35.181	24.952	0.558
160	19.403	35.187	25.061	0.588
170	18.976	35.119	25.120	0.617
180	18.508	35.082	25.210	0.646
190	17.990	35.010	25.283	0.674
200	17.596	34.956	25.338	0.701
250	14.722	34.532	25.673	0.828
300	12.117	34.246	25.982	0.940
315	11.696	34.207	26.031	0.971



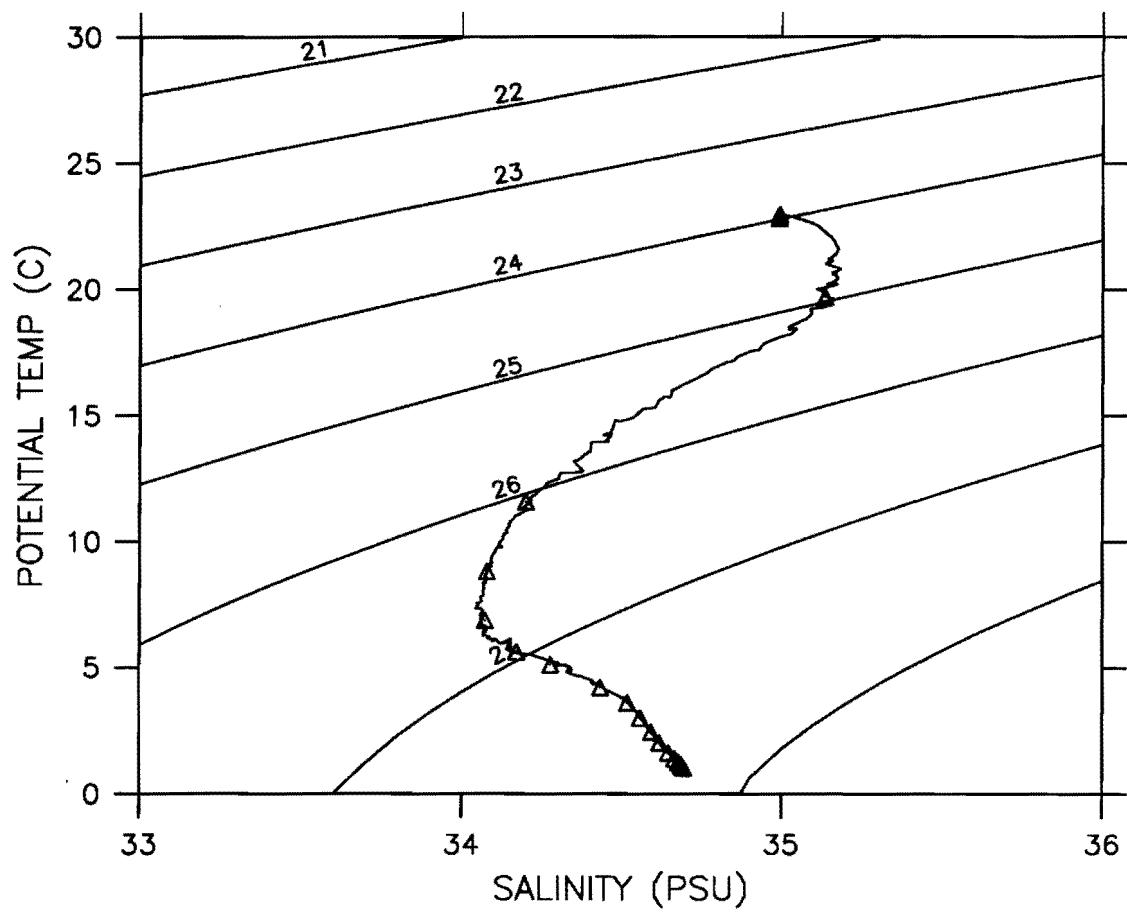
CAST CG2-91-DI -031 DATE 10 MAR 91 TIME 1647 GMT
LAT 21 55.0N LONG 152 00.0W



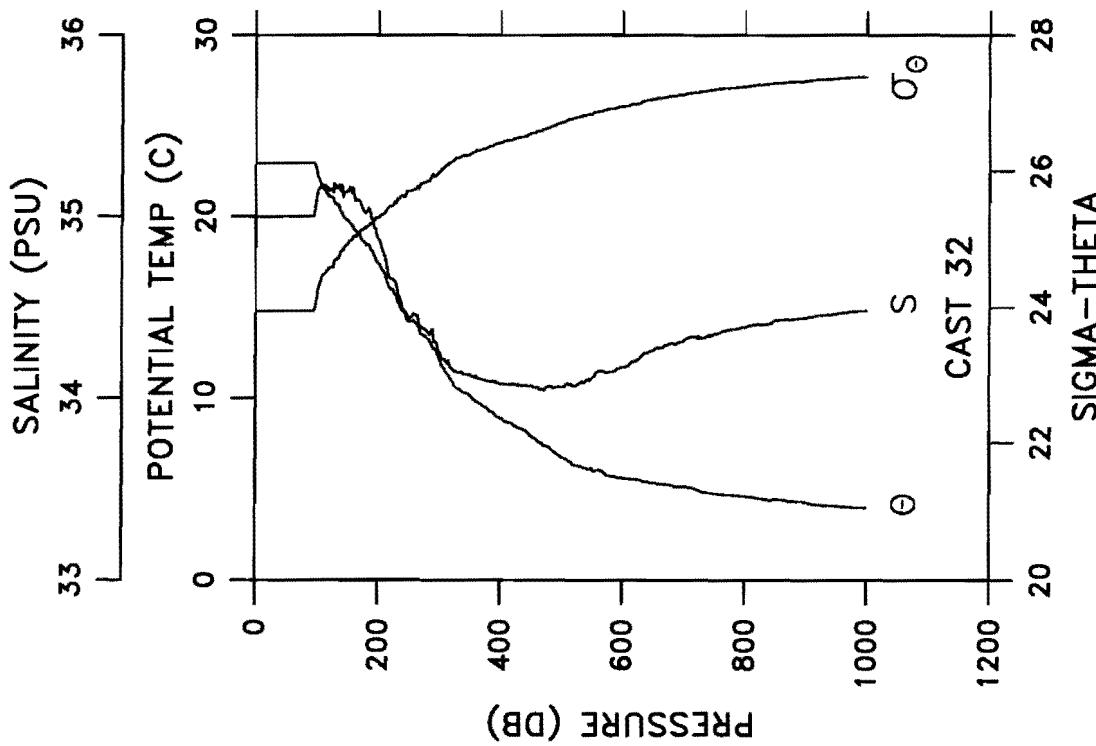
CAST CG2-91-DI-031 DATE 10 MAR 91 TIME 1647 GMT
 LAT 21 55.0N LONG 152 00.0W WEATHER 2 SEA STATE 6
 BAROMETER 1018 WIND DIR 075 T SPD 22 KT VISIBILITY 7
 CLOUD 6 AMOUNT 6 DRY 21.2 WET 17.7 DEPTH 5691 M



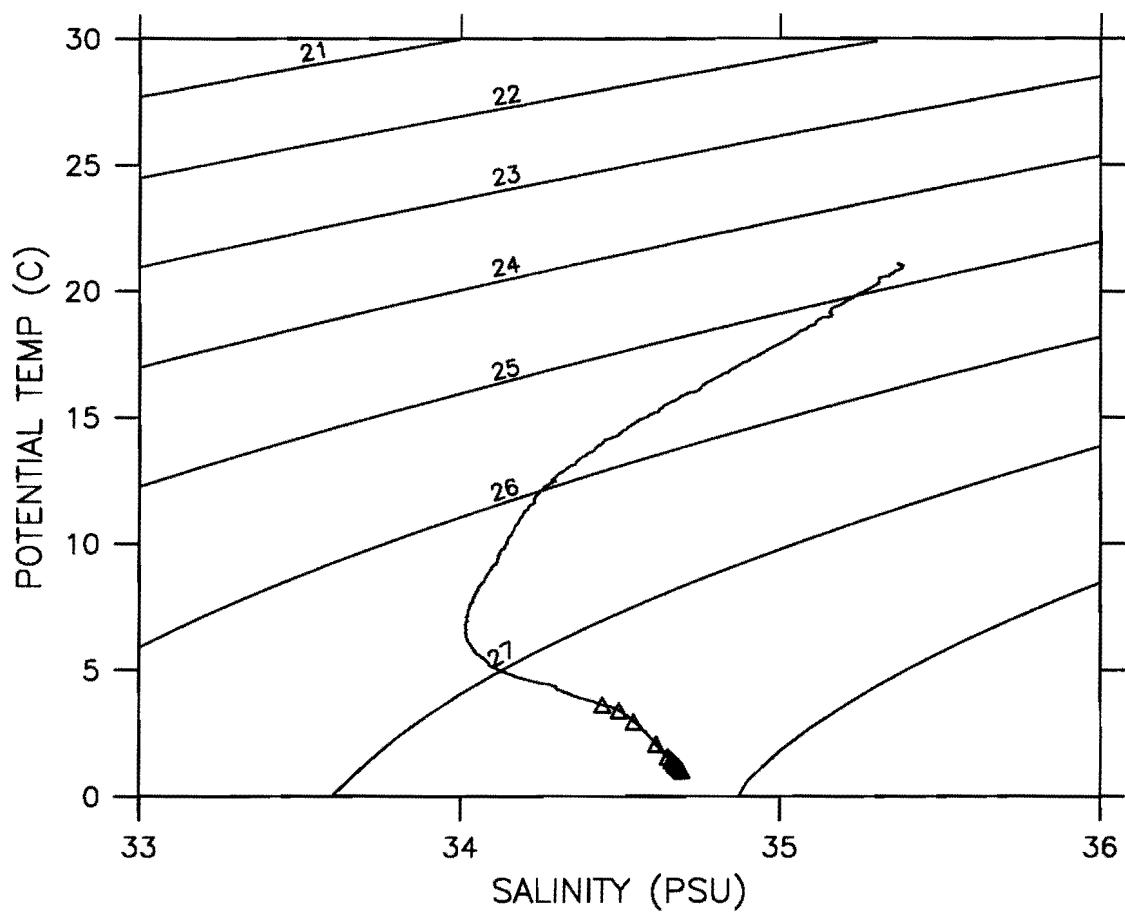
CAST CG2-91-DI -032 DATE 11 MAR 91 TIME 1030 GMT
LAT 22 40.6N LONG 151 59.5W



CAST CG2-91-DI-032		DATE 11 MAR 91	TIME 1030 GMT	LONG 151 59.5W	WEATHER 0	SEA STATE 5
LAT 22 40.6N		BAROMETER 20	WIND DIR 070 T	SPD 20 KT	VISIBILITY 9	CLOUD 0
AMOUNT 0		DRY 21.1	WET 18.7	DEPTH 5576 M		
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)		
0	22.955	35.000	23.948	0.000		
10	22.955	35.000	23.948	0.040		
20	22.954	35.000	23.948	0.079		
30	22.956	35.000	23.948	0.119		
40	22.959	35.000	23.947	0.158		
50	22.960	35.001	23.947	0.198		
60	22.959	35.000	23.947	0.238		
70	22.960	35.000	23.947	0.278		
80	22.960	35.000	23.947	0.317		
90	22.959	35.000	23.947	0.357		
100	22.532	35.110	24.152	0.397		
110	21.546	35.173	24.477	0.433		
120	21.116	35.141	24.571	0.467		
130	20.696	35.159	24.699	0.501		
140	20.225	35.156	24.822	0.533		
150	19.801	35.135	24.919	0.565		
160	19.308	35.127	25.040	0.595		
170	18.932	35.082	25.103	0.624		
180	18.436	35.024	25.183	0.653		
190	18.089	34.986	25.240	0.681		
200	17.421	34.877	25.320	0.709		
250	14.236	34.440	25.706	0.835		
300	12.131	34.255	25.986	0.947		
350	10.167	34.128	26.243	1.044		
400	8.866	34.076	26.416	1.132		
450	7.884	34.068	26.559	1.213		
500	6.746	34.062	26.714	1.287		
550	6.075	34.110	26.840	1.353		
600	5.575	34.169	26.949	1.414		
650	5.309	34.262	27.055	1.471		
700	5.093	34.310	27.118	1.523		
750	4.718	34.352	27.194	1.572		
800	4.580	34.389	27.238	1.618		
900	4.218	34.439	27.317	1.705		
1000	3.936	34.482	27.380	1.786		
1500	2.831	34.569	27.556	2.134		
2000	2.049	34.617	27.661	2.420		
2500	1.595	34.649	27.722	2.688		
3000	1.383	34.667	27.751	2.898		
3500	1.249	34.678	27.770	3.122		
4000	1.161	34.685	27.781	3.345		
5000	1.028	34.689	27.789	3.571		
5495	1.011	34.693	27.796	3.801		
		34.694	27.799	4.035		

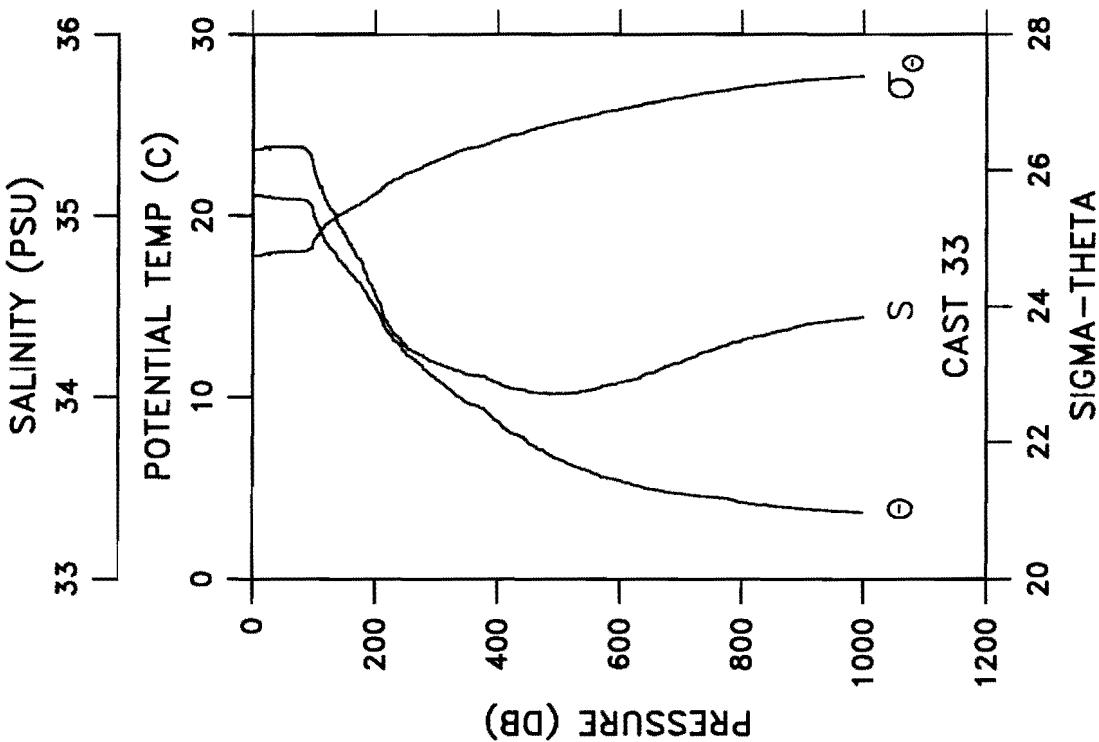


CAST CG2-91-DI -033 DATE 12 MAR 91 TIME 0452 GMT
LAT 23 59.8N LONG 151 58.8W

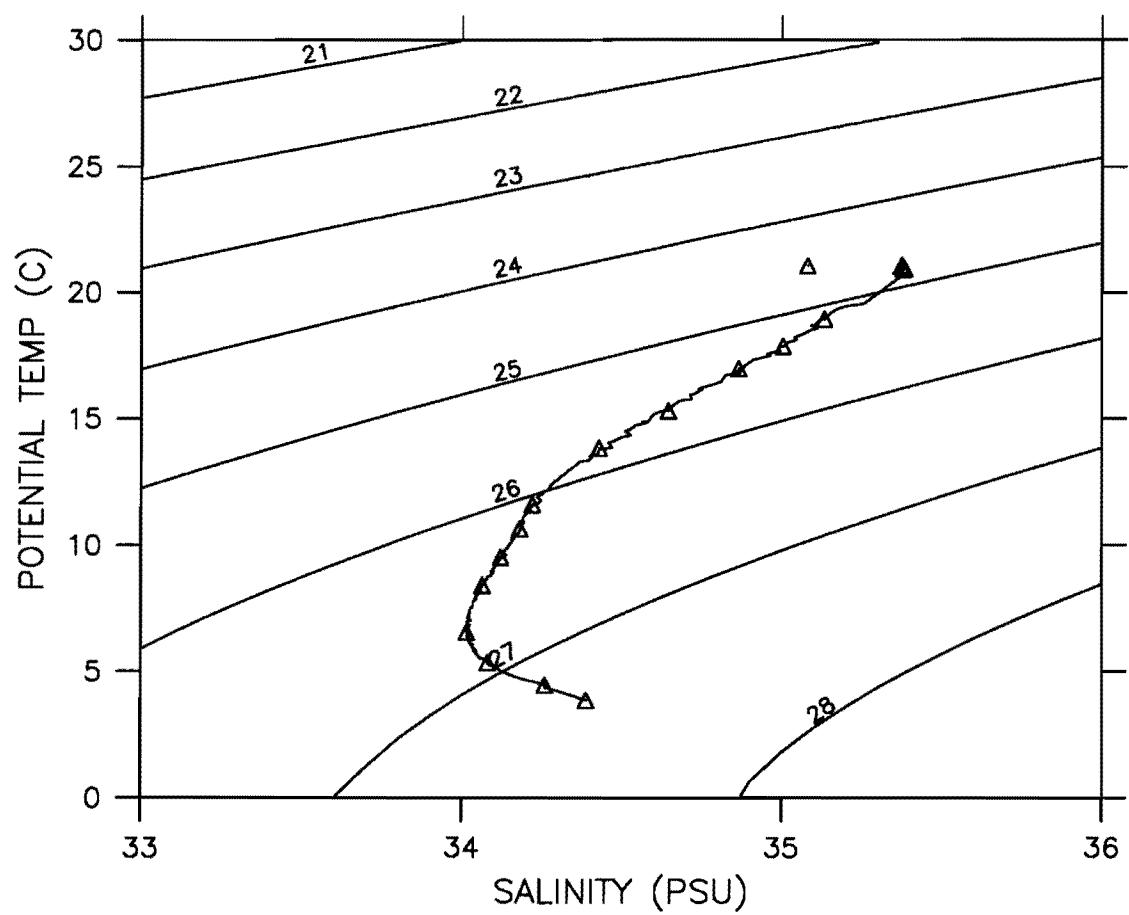


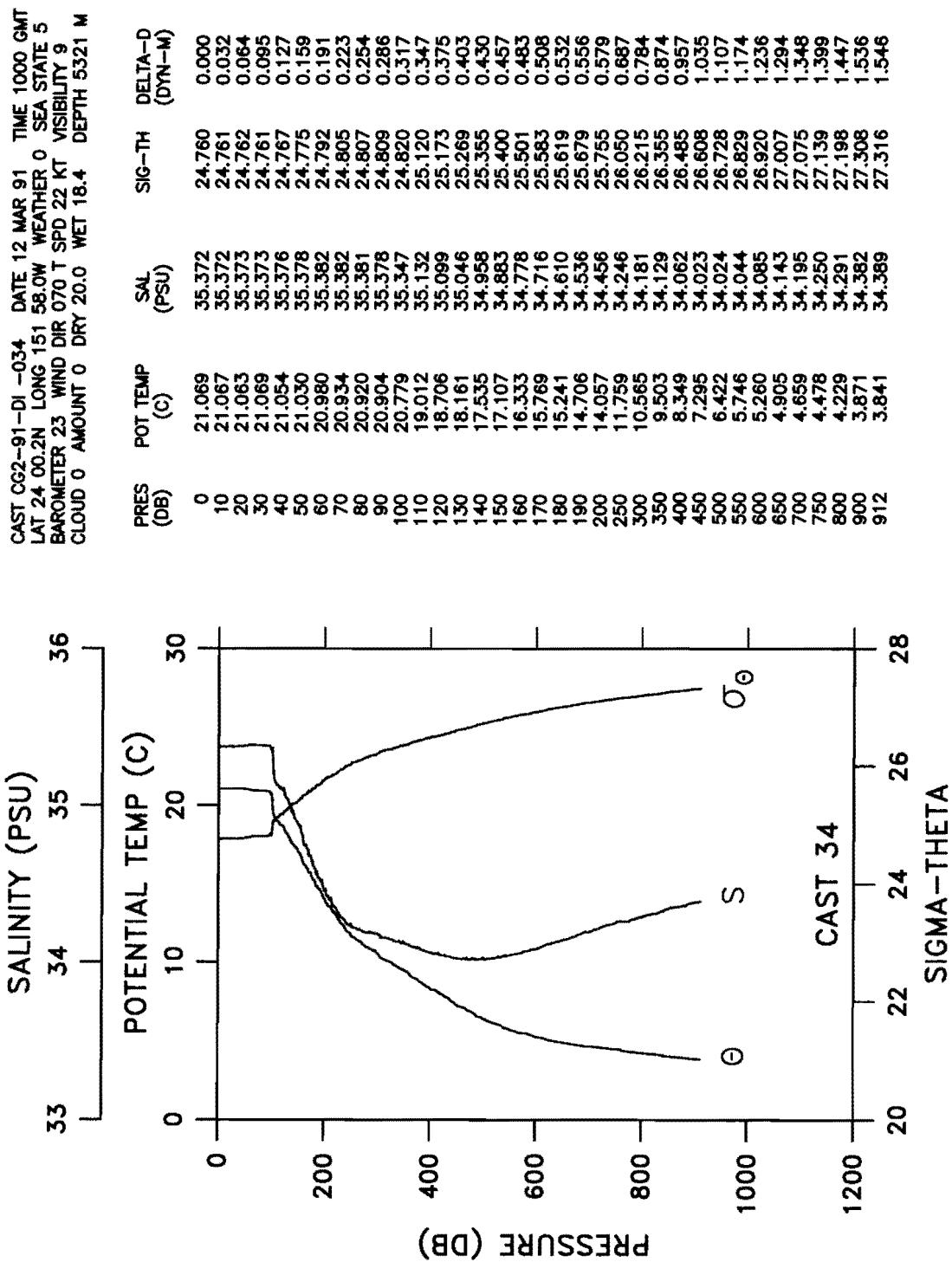
CAST CG2-91-DI -033		DATE 12 MAR 91		TIME 0452 GMT	
LAT	LONG	WEATHER	SEA STATE	DEPTH	
23 59.8N	151 58.8W	22	5	5617 M	
BAROMETER	WIND DIR	060 T	SPD 28 KT	VISIBILITY	7
CLOUD 8	AMOUNT 2	DRY 20.5	WET 18.9	DEPTH	

PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	21.109	35.365	24.744	0.000
10	21.119	35.367	24.742	0.032
20	21.046	35.375	24.768	0.064
30	20.993	35.383	24.789	0.096
40	20.959	35.382	24.797	0.127
50	20.934	35.381	24.803	0.159
60	20.921	35.381	24.807	0.190
70	20.914	35.380	24.808	0.222
80	20.892	35.377	24.812	0.253
90	20.706	35.350	24.842	0.285
100	19.921	35.248	24.973	0.316
110	19.119	35.157	25.112	0.345
120	18.477	35.074	25.211	0.374
130	18.087	35.025	25.271	0.401
140	17.523	34.938	25.342	0.429
150	17.206	34.895	25.386	0.455
160	16.769	34.836	25.444	0.481
170	16.356	34.767	25.488	0.507
180	15.999	34.717	25.531	0.532
190	15.392	34.633	25.603	0.557
200	14.908	34.559	25.653	0.581
250	12.405	34.285	25.957	0.693
300	10.963	34.185	26.148	0.794
350	9.687	34.124	26.321	0.886
400	8.684	34.080	26.448	0.972
450	7.515	34.028	26.581	1.051
500	6.587	34.017	26.701	1.124
550	5.933	34.035	26.799	1.192
600	5.411	34.077	26.896	1.255
650	4.931	34.134	26.996	1.314
700	4.678	34.190	27.070	1.368
750	4.488	34.254	27.141	1.419
800	4.204	34.313	27.218	1.467
900	3.835	34.397	27.323	1.555
1000	3.632	34.443	27.380	1.634
1500	2.623	34.574	27.579	1.970
2000	1.921	34.622	27.675	2.243
2500	1.556	34.650	27.725	2.485
3000	1.347	34.667	27.754	2.712
3500	1.221	34.679	27.773	2.933
4000	1.150	34.685	27.782	3.155
4500	1.084	34.690	27.791	3.381
5000	1.032	34.693	27.797	3.610
5467	1.014	34.693	27.798	3.832

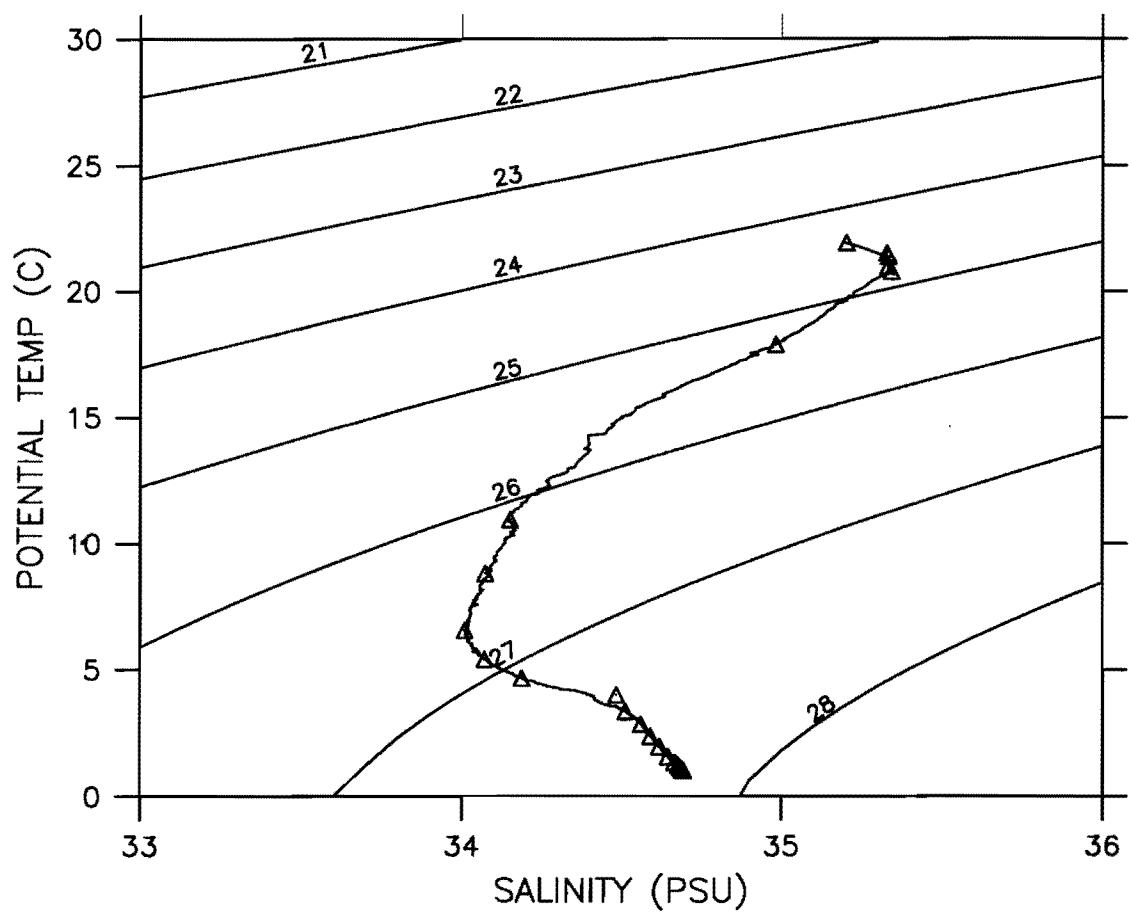


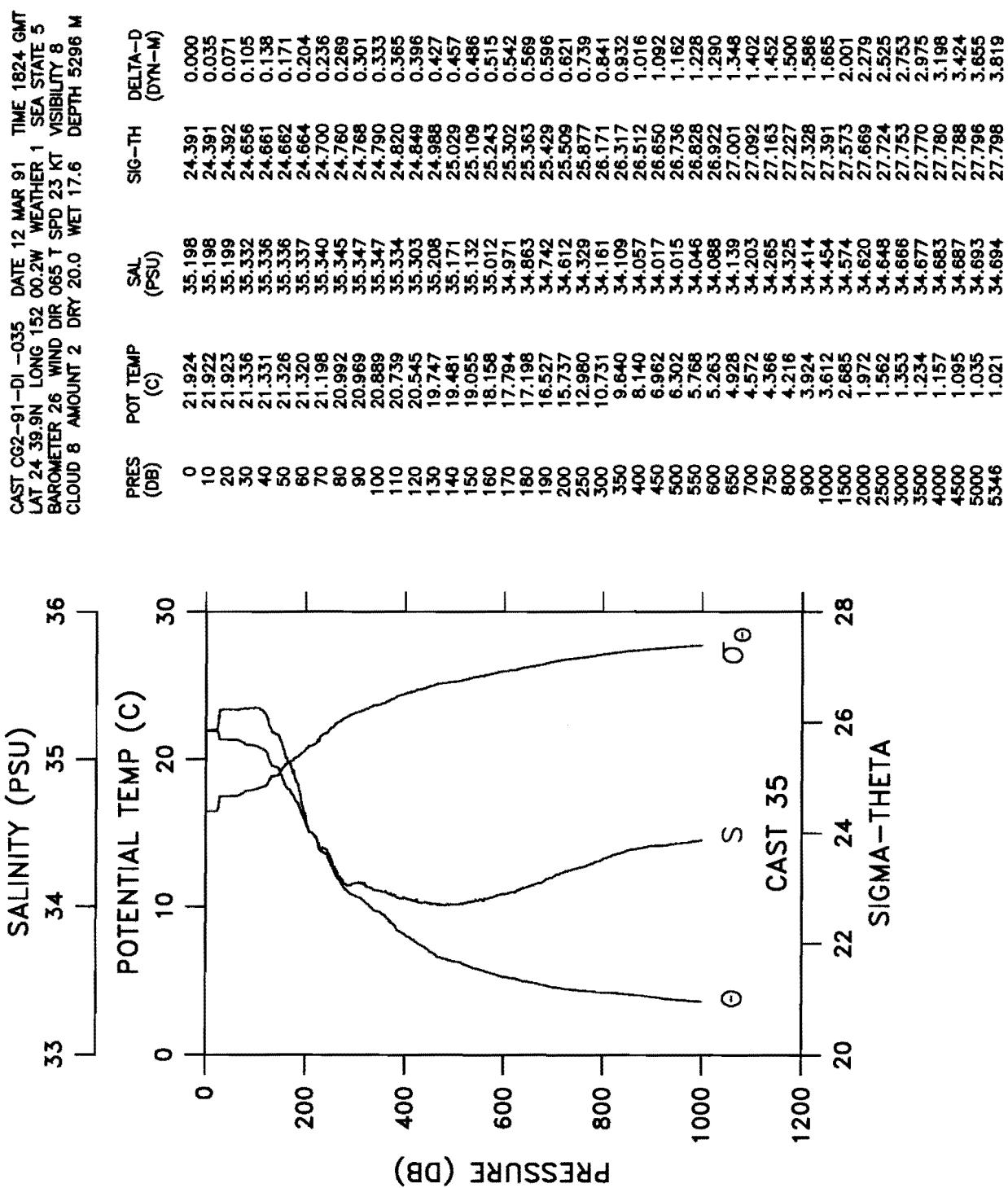
CAST CG2-91-DI -034 DATE 12 MAR 91 TIME 1000 GMT
LAT 24 00.2N LONG 151 58.0W



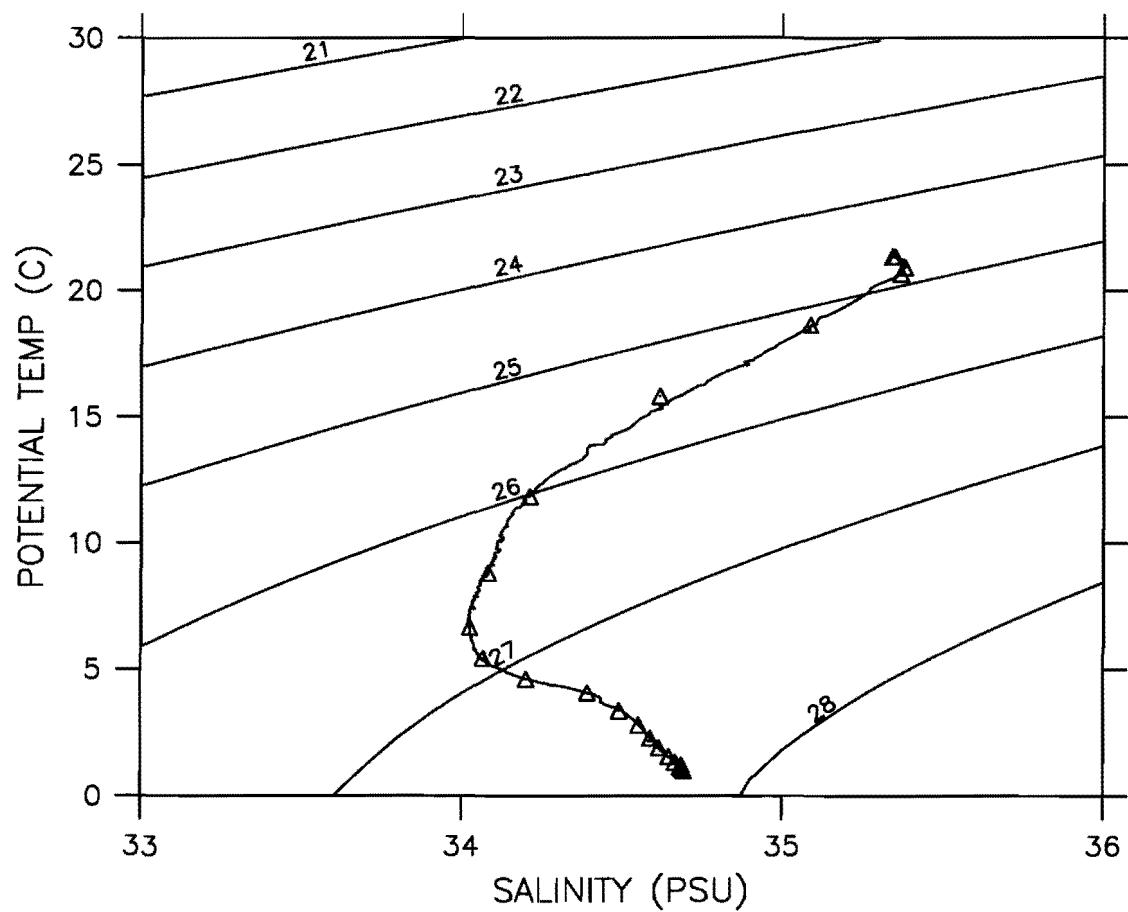


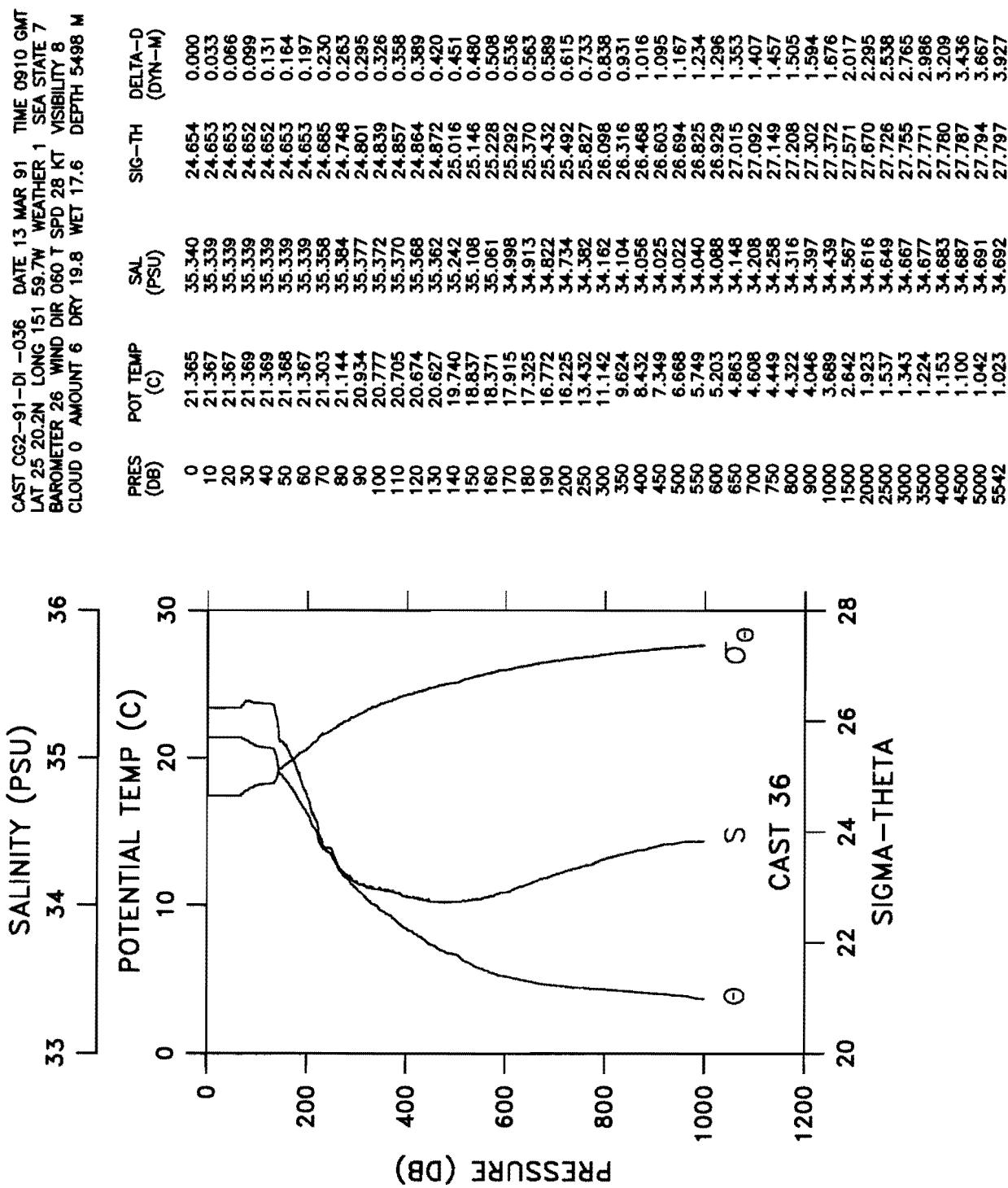
CAST CG2-91-DI -035 DATE 12 MAR 91 TIME 1824 GMT
LAT 24 39.9N LONG 152 00.2W



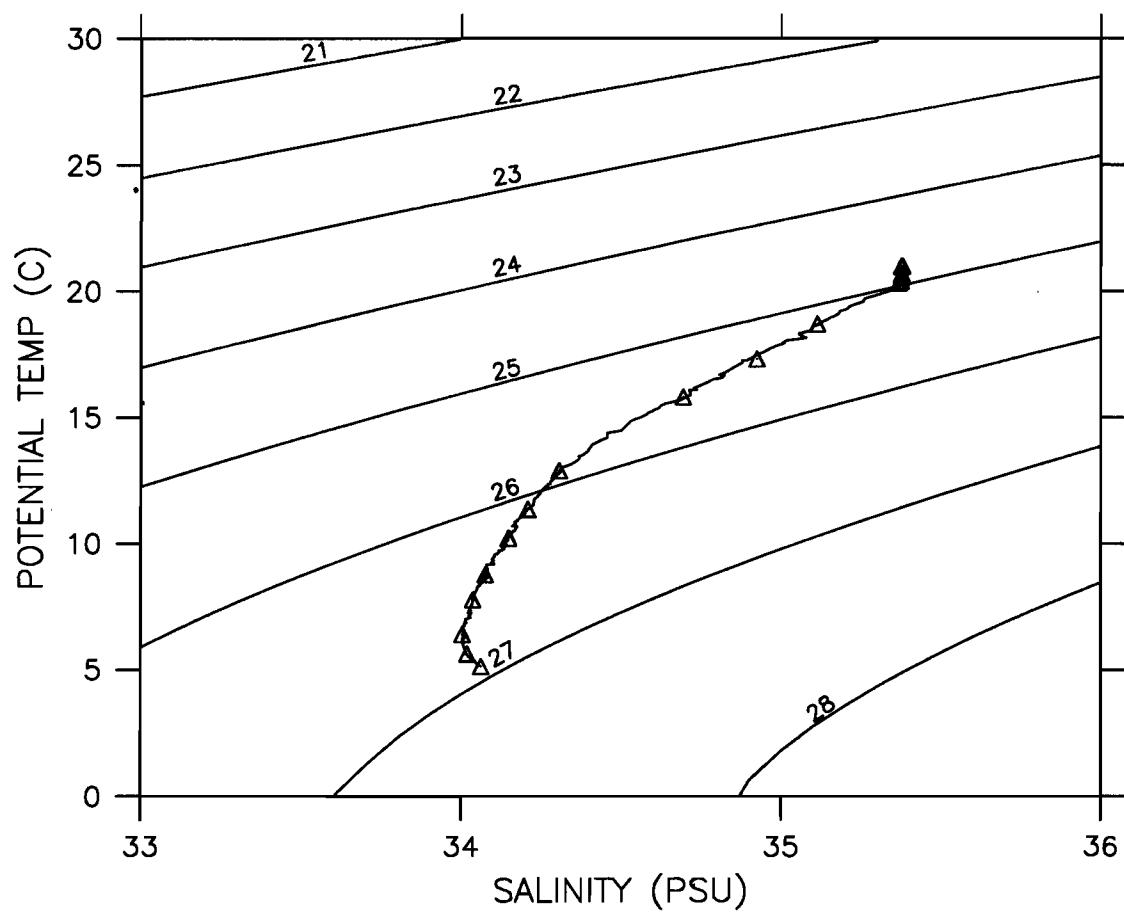


CAST CG2-91-DI -036 DATE 13 MAR 91 TIME 0910 GMT
LAT 25 20.2N LONG 151 59.7W



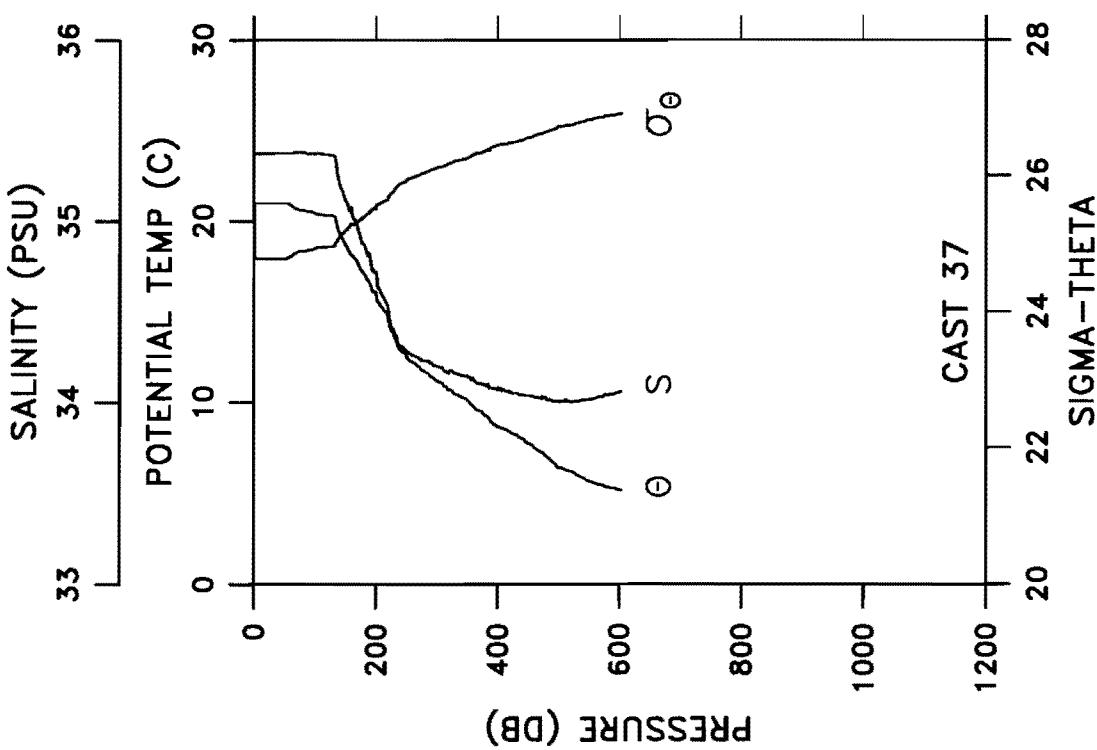


CAST CG2-91-DI -037 DATE 13 MAR 91 TIME 1625 GMT
LAT 26 00.1N LONG 151 59.7W

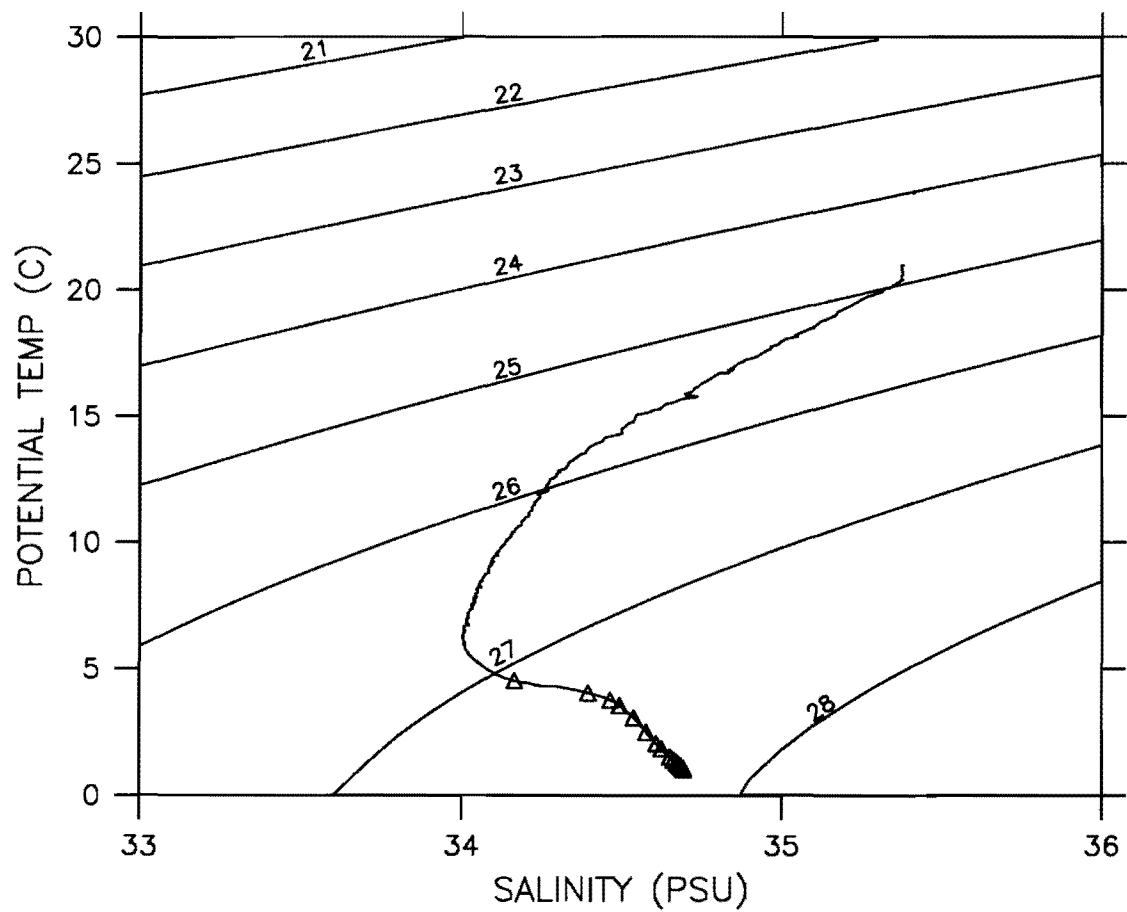


CAST CG2-91-DI -037 DATE 13 MAR 91 TIME 1625 GMT
 LAT 26 00.1N LONG 151 59.7W WEATHER 1 SEA STATE 4
 BAROMETER 26 WIND DIR 060 T SPD 22 KT VISIBILITY 8
 CLOUD 6 AMOUNT 2 DRY 18.8 WET 15.5 DEPTH 5372 M

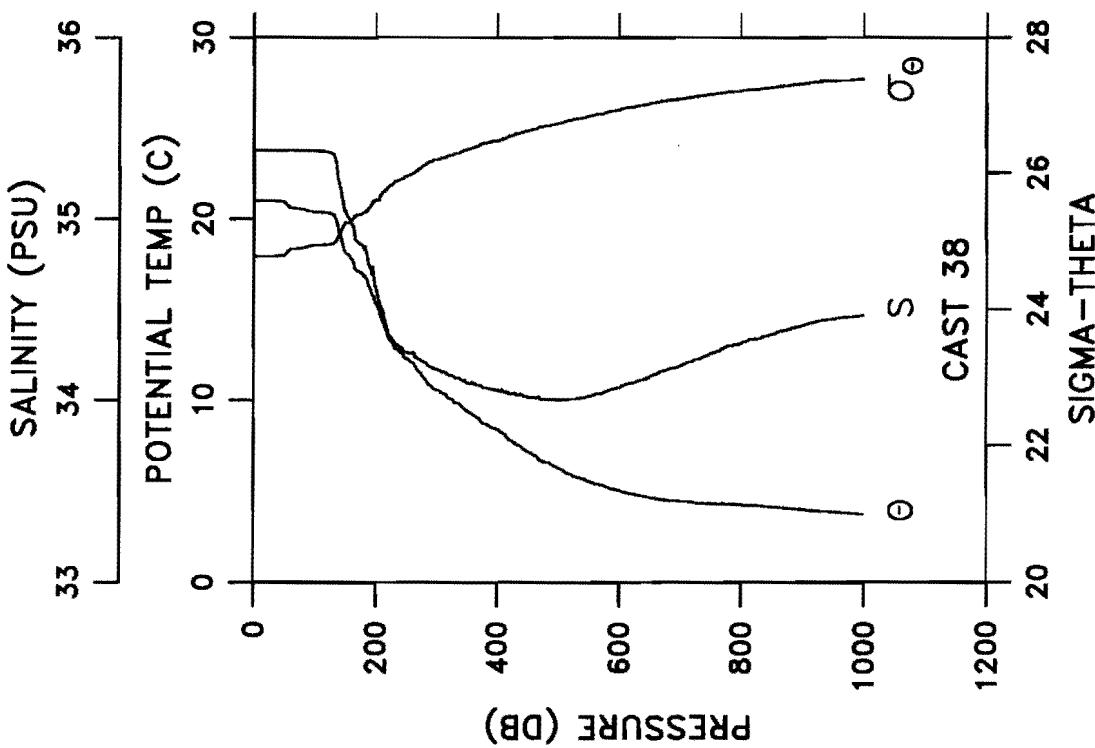
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	20.979	35.378	24.789	0.000
10	21.002	35.372	24.778	0.032
20	21.004	35.372	24.778	0.063
30	21.002	35.373	24.779	0.095
40	20.997	35.374	24.781	0.127
50	21.000	35.374	24.780	0.158
60	20.887	35.374	24.811	0.190
70	20.678	35.379	24.871	0.221
80	20.600	35.380	24.893	0.252
90	20.531	35.373	24.906	0.283
100	20.438	35.370	24.929	0.314
110	20.365	35.372	24.950	0.344
120	20.332	35.367	24.955	0.374
130	20.292	35.362	24.962	0.405
140	19.270	35.202	25.107	0.435
150	18.651	35.112	25.197	0.463
160	18.096	35.051	25.289	0.491
170	17.694	34.961	25.318	0.518
180	17.093	34.867	25.391	0.545
190	16.506	34.788	25.468	0.571
200	15.897	34.717	25.554	0.596
250	12.505	34.284	25.937	0.712
300	11.199	34.199	26.116	0.814
350	10.174	34.147	26.256	0.908
400	8.662	34.070	26.443	0.995
450	7.738	34.036	26.556	1.076
500	6.388	34.004	26.716	1.149
550	5.642	34.016	26.820	1.217
600	5.187	34.056	26.905	1.279
603	5.157	34.060	26.912	1.283



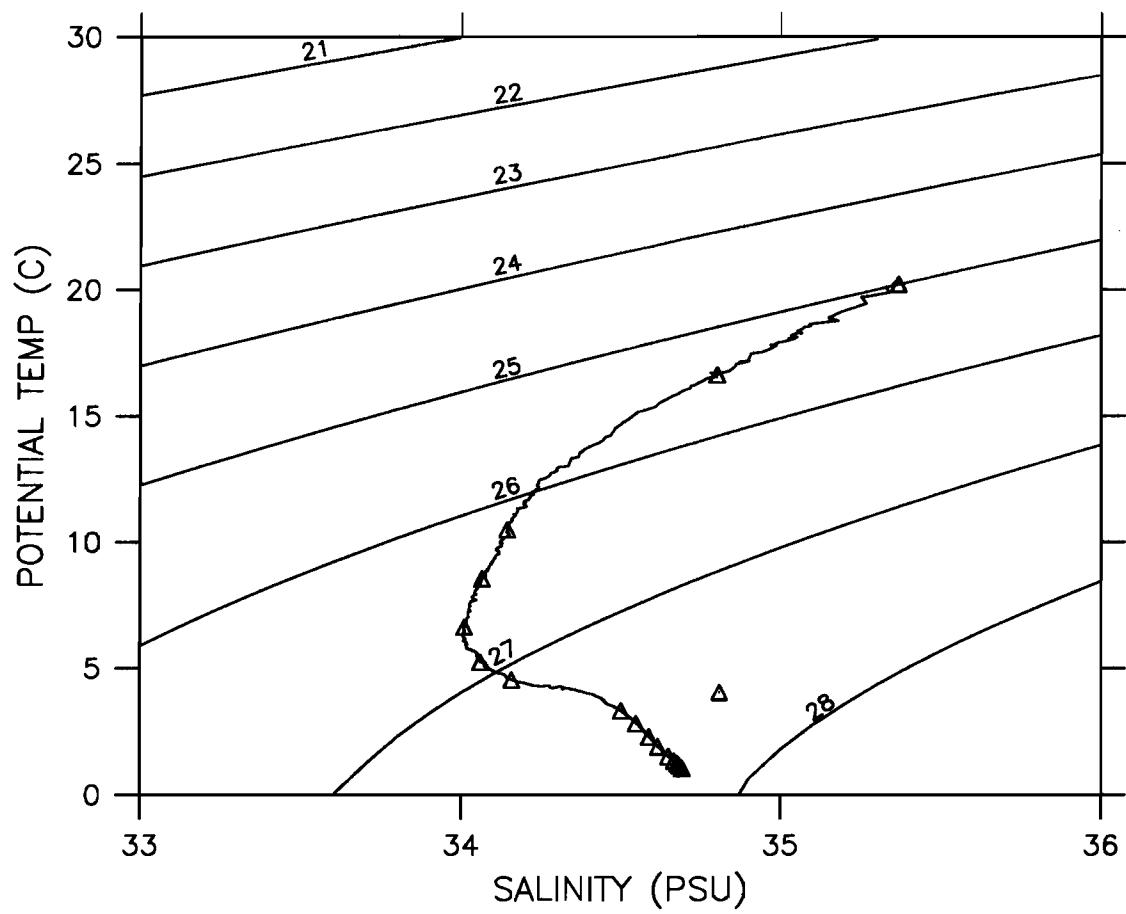
CAST CG2-91-DI -038 DATE 13 MAR 91 TIME 2220 GMT
LAT 26 00.2N LONG 152 00.0W

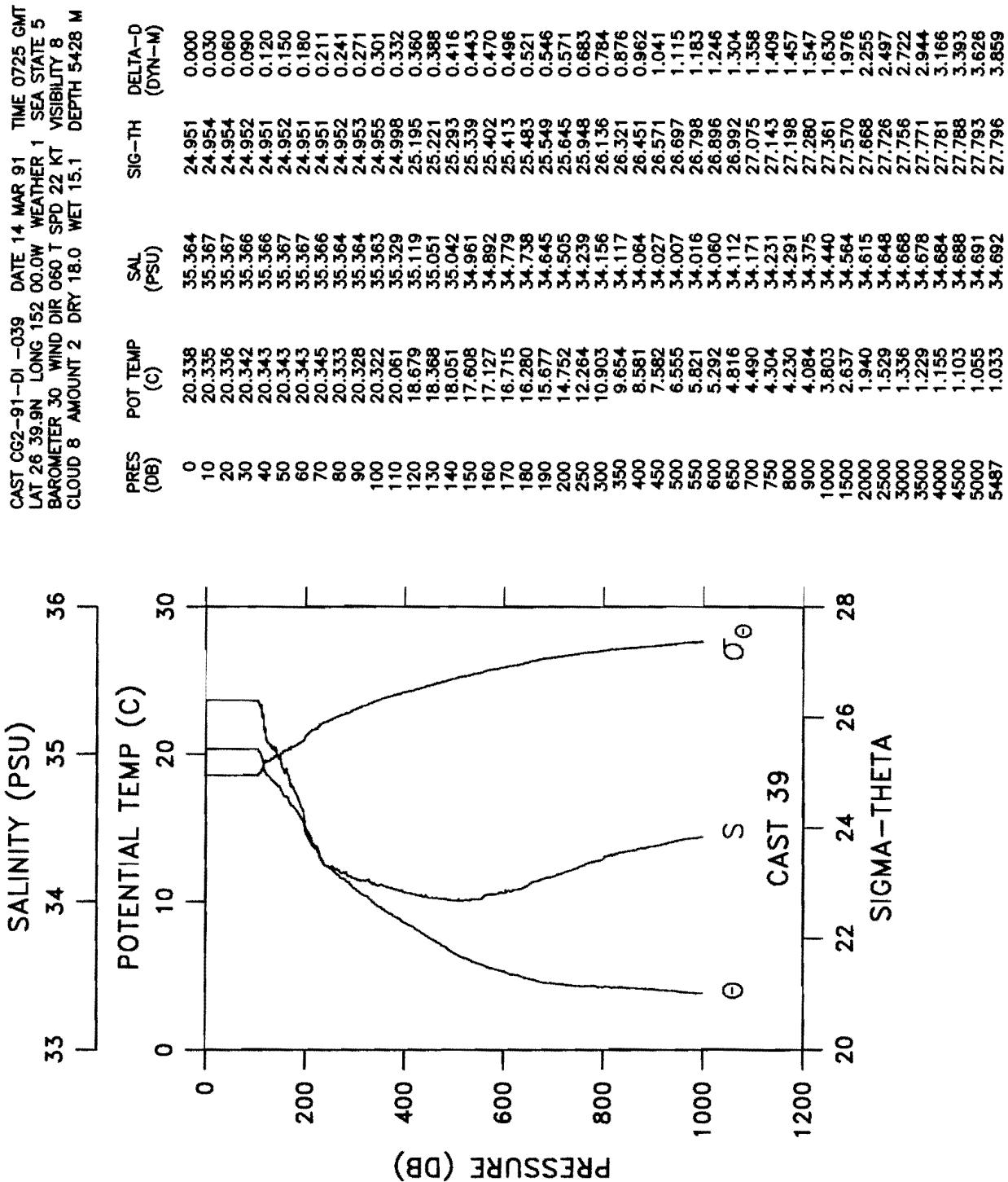


CAST CG2-91-DI -038	DATE 13 MAR 91	TIME 2220 GMT
LAT 26 00.2N	LONG 152 00.0W	WEATHER 1 SEA STATE 7
BAROMETER 28	WIND DIR 080 T	SPD 22 KT VISIBILITY 7
CLOUD 8 AMOUNT 5	DRY 19.0	WET 16.4 DEPTH 5373 M
PRES (DB)	POT TEMP (C)	SAL (PSU)
0	20.986	35.381
10	20.993	35.375
20	20.993	35.375
30	20.991	35.375
40	20.967	35.376
50	20.939	35.375
60	20.613	35.379
70	20.576	35.375
80	20.531	35.375
90	20.433	35.373
100	20.382	35.374
110	20.358	35.371
120	20.326	35.368
130	20.250	35.357
140	19.286	35.200
150	18.144	35.051
160	17.787	34.976
170	17.106	34.869
180	16.818	34.830
190	16.160	34.737
200	15.283	34.618
250	12.327	34.267
300	10.584	34.172
350	9.414	34.099
400	8.388	34.056
450	7.173	34.018
500	6.273	34.004
550	5.539	34.024
600	5.053	34.072
650	4.664	34.131
700	4.454	34.190
750	4.318	34.260
800	4.264	34.314
900	3.993	34.410
1000	3.737	34.466
1500	2.656	34.570
2000	1.959	34.614
2500	1.546	34.648
3000	1.351	34.667
3500	1.227	34.677
4000	1.153	34.684
4500	1.092	34.688
5000	1.043	34.691
5414	1.027	34.693

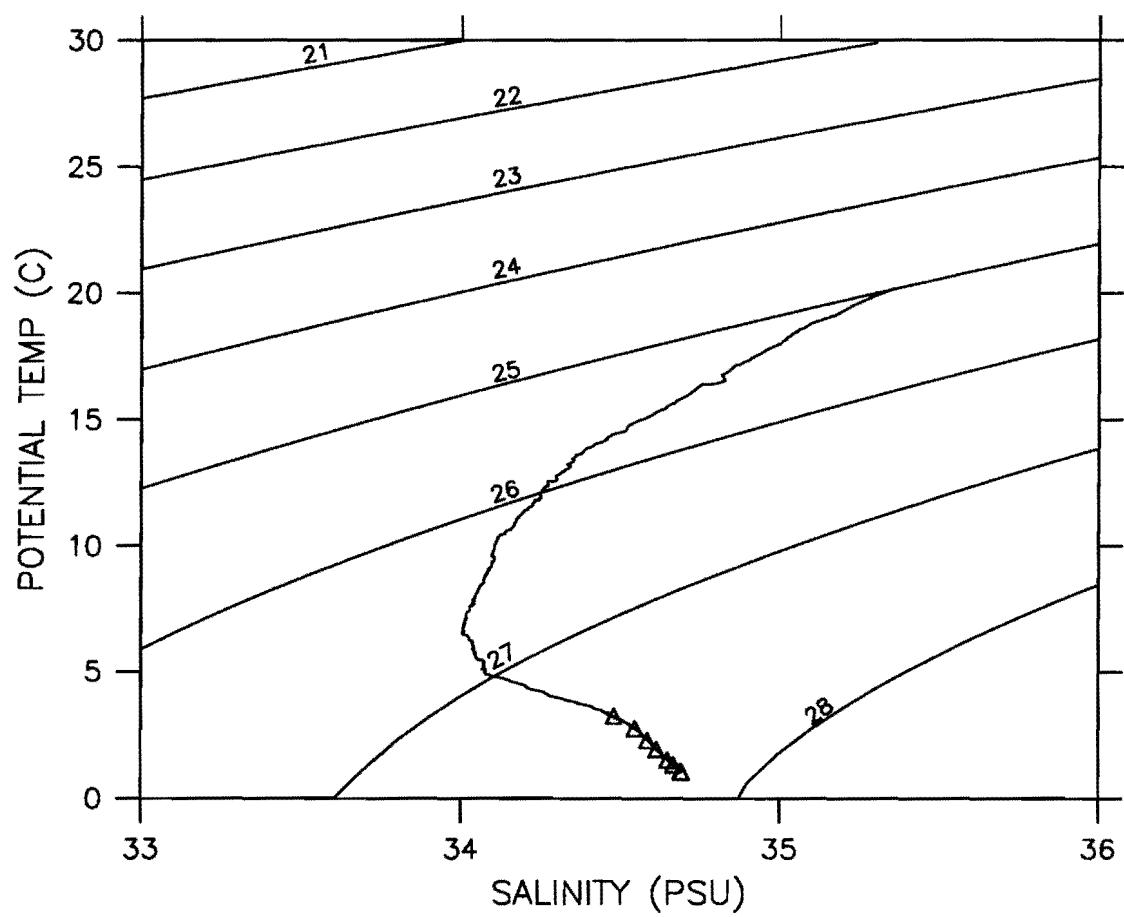


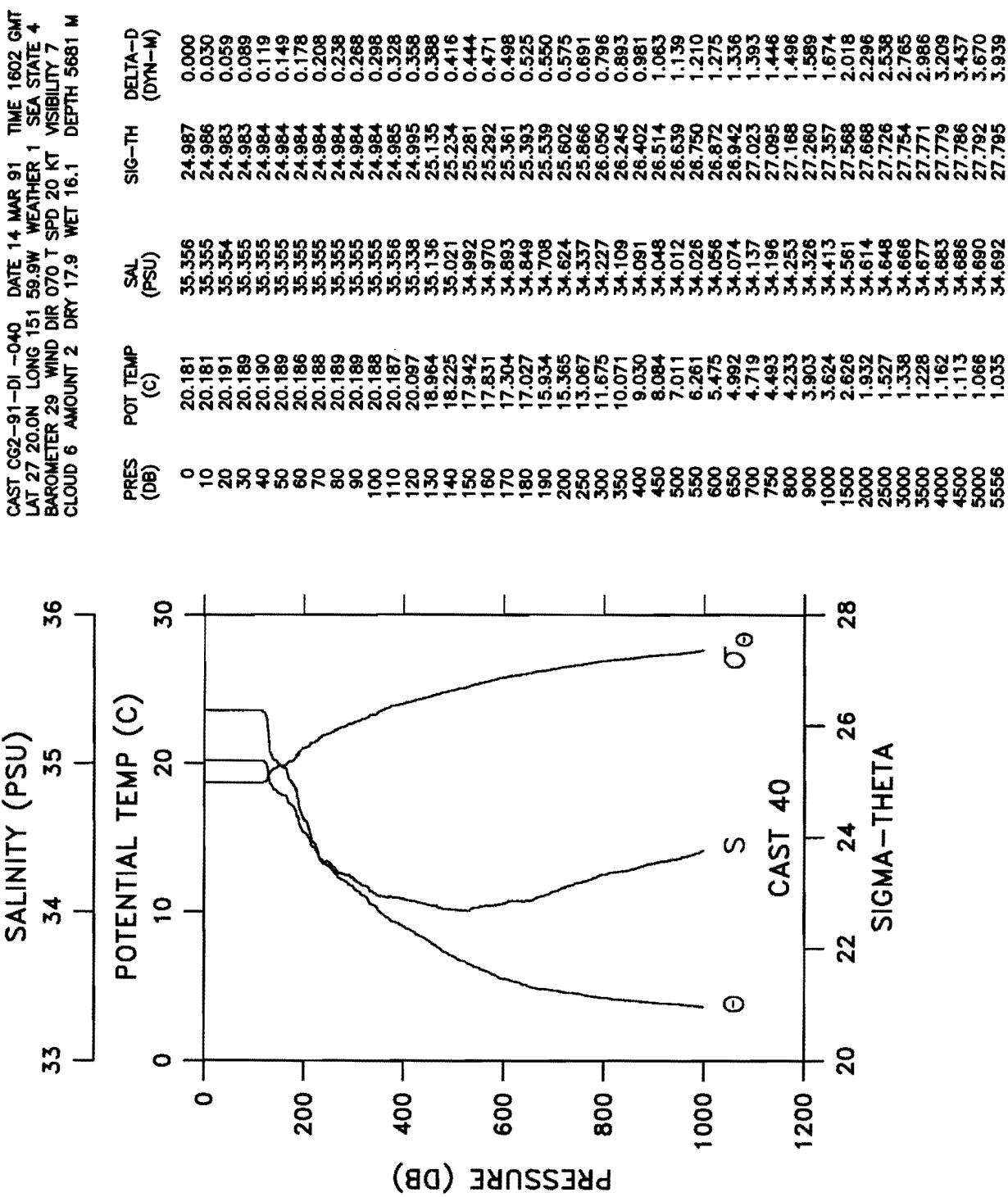
CAST CG2-91-DI -039 DATE 14 MAR 91 TIME 0725 GMT
LAT 26 39.9N LONG 152 00.0W



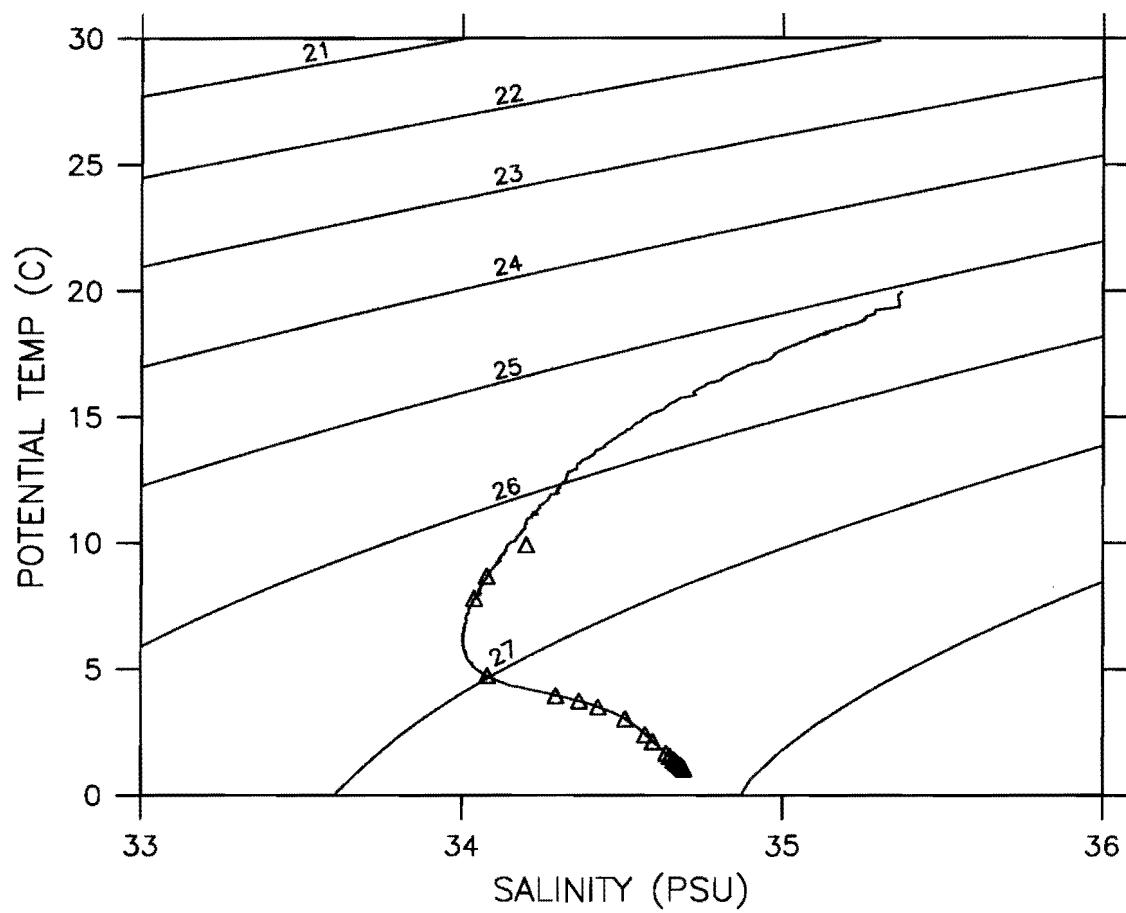


CAST CG2-91-DI -040 DATE 14 MAR 91 TIME 1602 GMT
LAT 27 20.0N LONG 151 59.9W

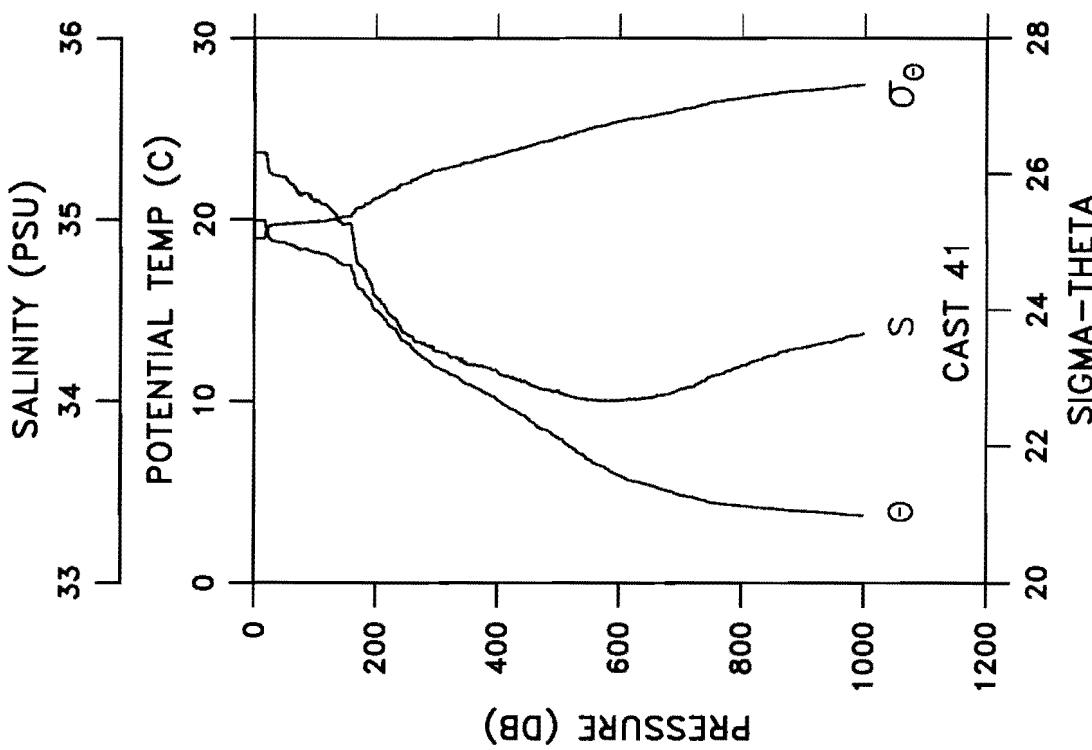




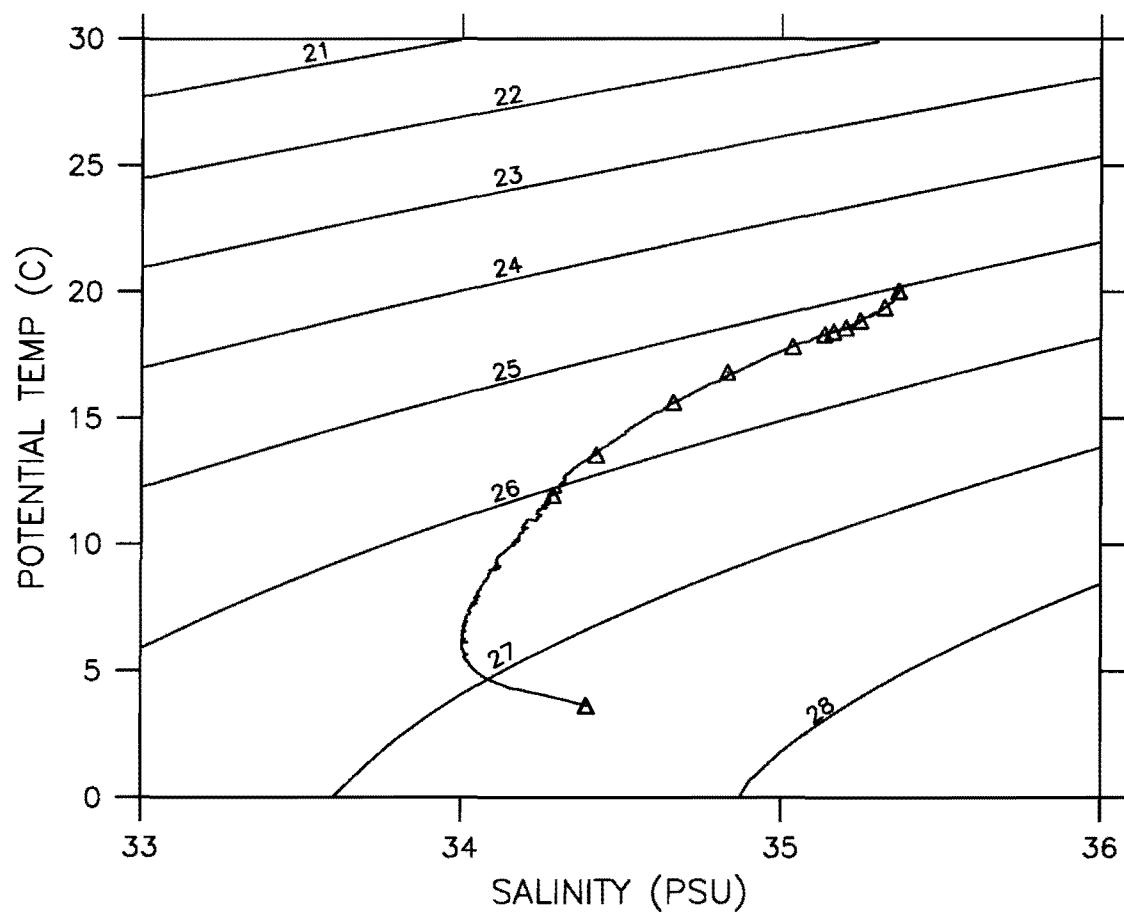
CAST CG2-91-DI -041 DATE 15 MAR 91 TIME 0100 GMT
LAT 28 01.4N LONG 151 59.3W



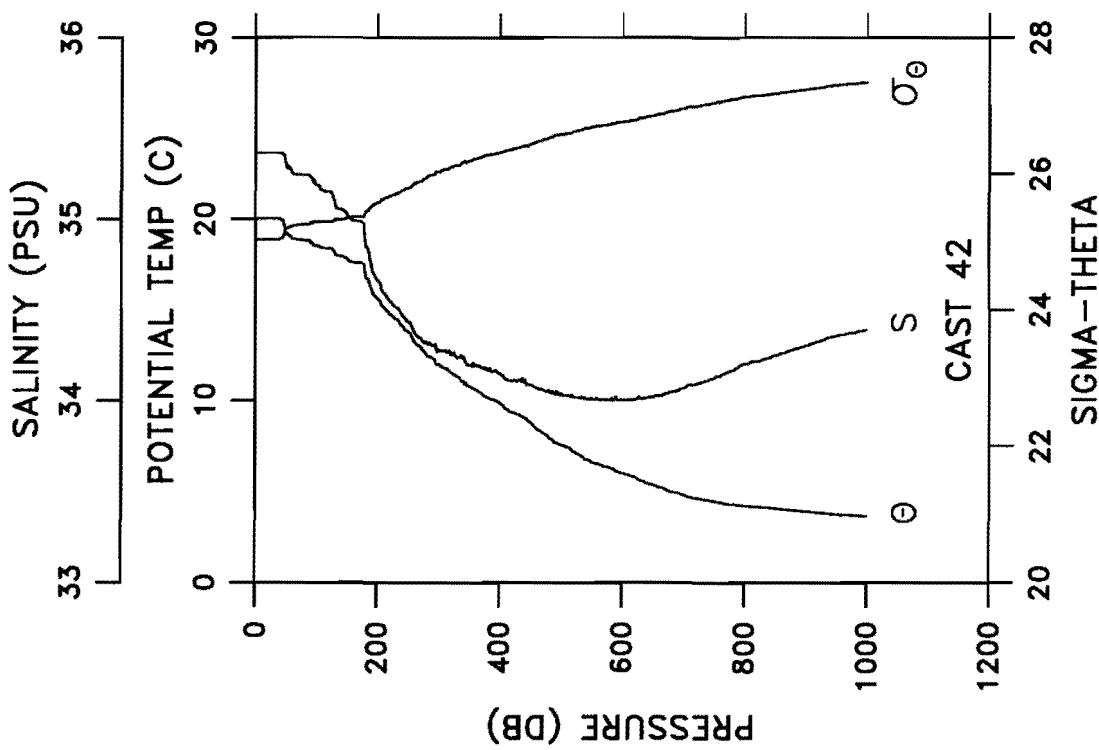
CAST CG2-91-DI -041		DATE 15 MAR 91	TIME 0100 GMT	WEATHER 1	SEA STATE 4
LAT 28 01.4N LONG 151 59.3W		BAROMETER 29	WIND DIR 060 T SPD 22 KT	VISIBILITY 9	DEPTH 5333 M
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	19.949	35.367	25.056	0.000	
10	19.949	35.368	25.057	0.029	
20	19.354	35.363	25.209	0.058	
30	18.837	35.247	25.253	0.085	
40	18.775	35.240	25.263	0.112	
50	18.746	35.234	25.266	0.139	
60	18.619	35.195	25.268	0.167	
70	18.438	35.152	25.281	0.194	
80	18.376	35.139	25.286	0.221	
90	18.306	35.130	25.296	0.248	
100	18.189	35.104	25.306	0.275	
110	18.125	35.087	25.309	0.302	
120	18.060	35.074	25.315	0.329	
130	17.877	35.040	25.334	0.355	
140	17.619	34.990	25.359	0.382	
150	17.501	34.973	25.375	0.409	
160	17.294	34.961	25.415	0.435	
170	16.276	34.759	25.500	0.461	
180	16.044	34.728	25.529	0.486	
190	15.589	34.659	25.580	0.511	
200	15.001	34.576	25.646	0.535	
250	13.229	34.371	25.860	0.650	
300	11.873	34.275	26.050	0.755	
350	10.949	34.203	26.164	0.854	
400	10.105	34.168	26.285	0.948	
450	9.052	34.099	26.405	1.036	
500	7.987	34.060	26.538	1.118	
550	6.768	34.009	26.670	1.193	
600	5.894	34.003	26.778	1.263	
650	5.383	34.019	26.853	1.328	
700	4.819	34.066	26.955	1.389	
750	4.416	34.135	27.055	1.446	
800	4.232	34.194	27.121	1.498	
900	3.946	34.294	27.230	1.594	
1000	3.703	34.370	27.315	1.682	
1500	2.598	34.555	27.566	2.033	
2000	1.892	34.616	27.673	2.308	
2500	1.534	34.647	27.724	2.550	
3000	1.334	34.666	27.754	2.776	
3500	1.224	34.677	27.771	2.998	
4000	1.157	34.683	27.786	3.220	
4500	1.108	34.687	27.792	3.448	
5000	1.062	34.690	27.792	3.681	
5530	1.038	34.692	27.795	3.936	



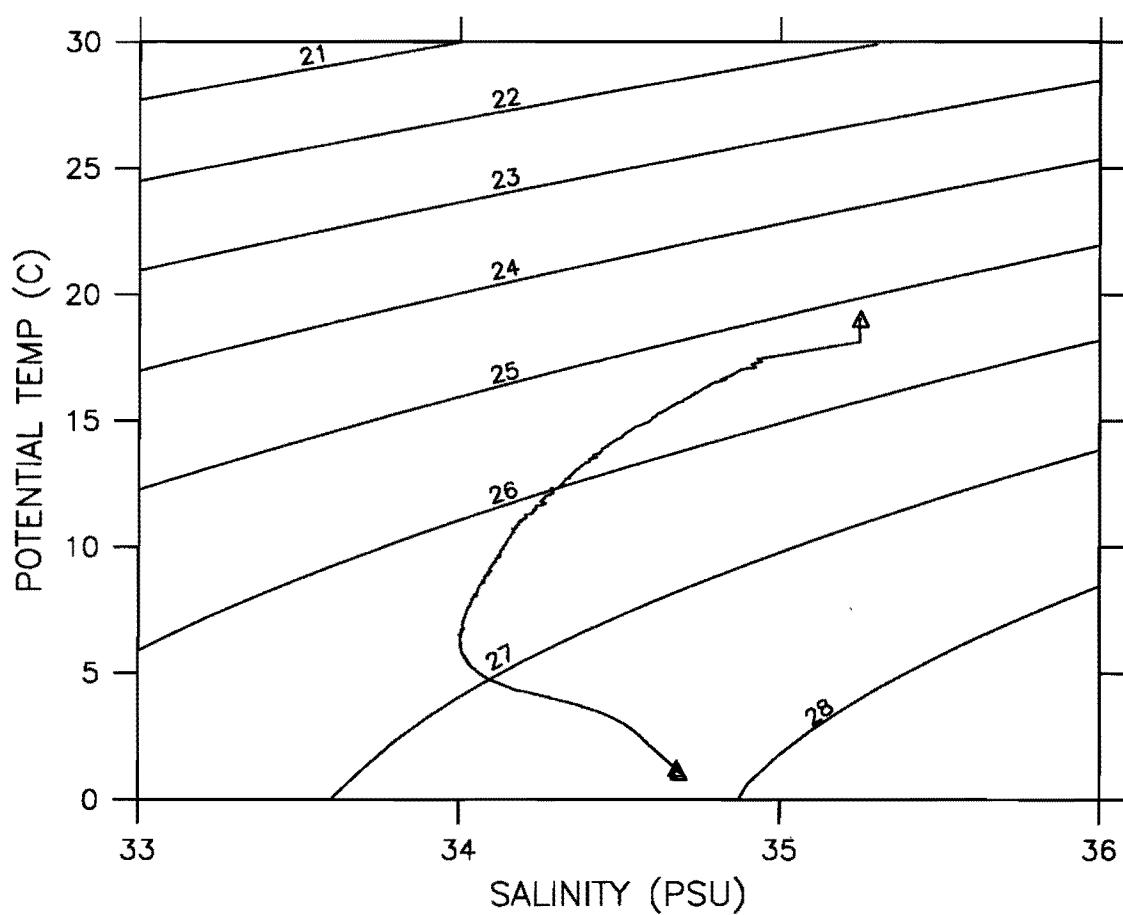
CAST CG2-91-DI -042 DATE 15 MAR 91 TIME 0855 GMT
LAT 28 00.0N LONG 151 59.7W



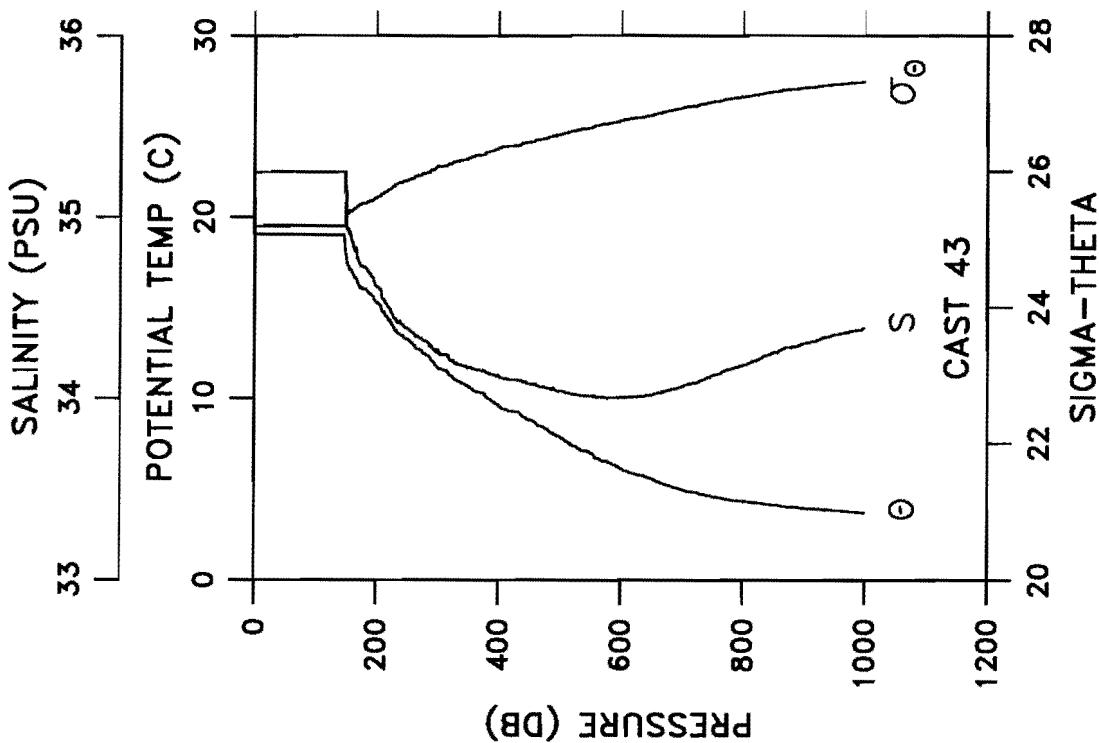
CAST CG2-91-DI -042 DATE 15 MAR 91 TIME 0855 GMT
 LAT 28 00.0N LONG 151 59.7W WEATHER 1 SEA STATE 4
 BAROMETER 31 WIND DIR 060 T SPD 25 KT VISIBILITY 8
 CLOUD 8 AMOUNT 6 DRY 17.1 WET 15.1 DEPTH 5516 M



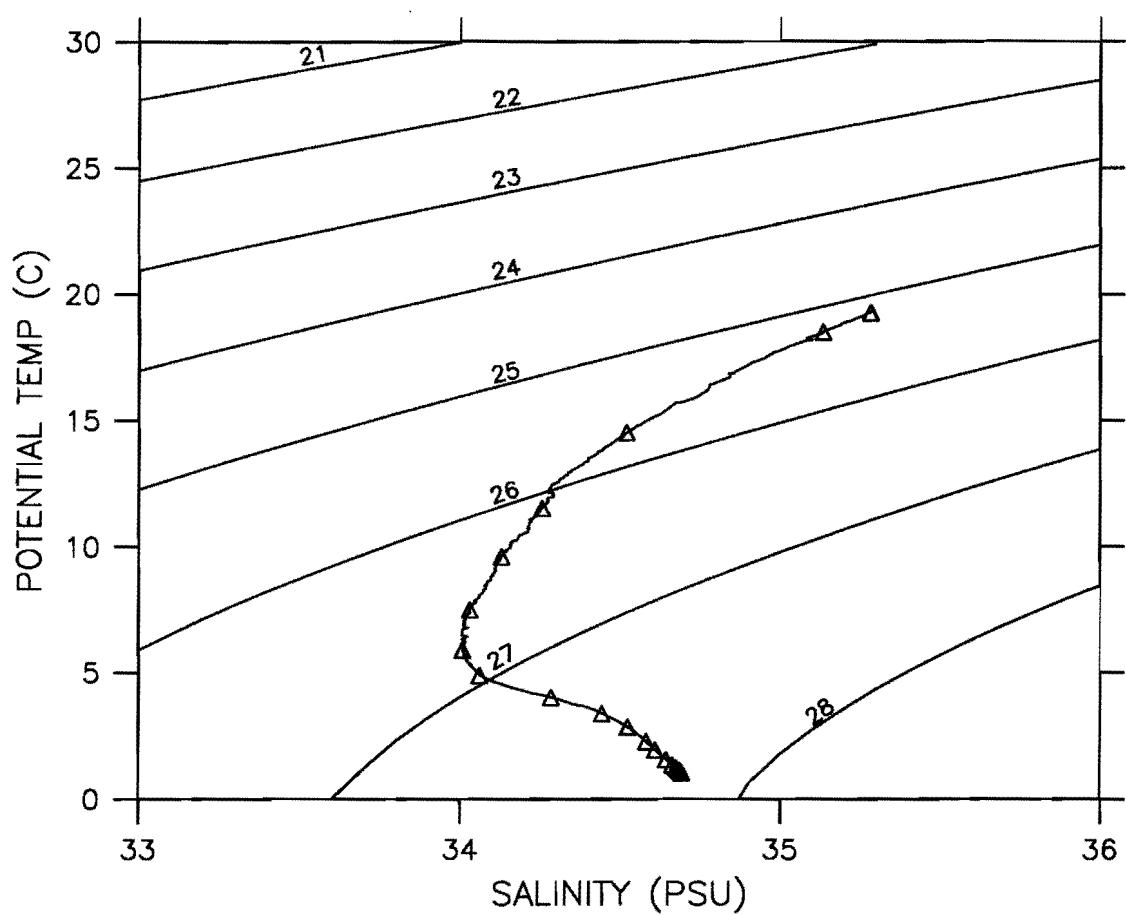
CAST CG2-91-DI -043 DATE 15 MAR 91 TIME 1638 GMT
LAT 28 39.8N LONG 151 59.9W



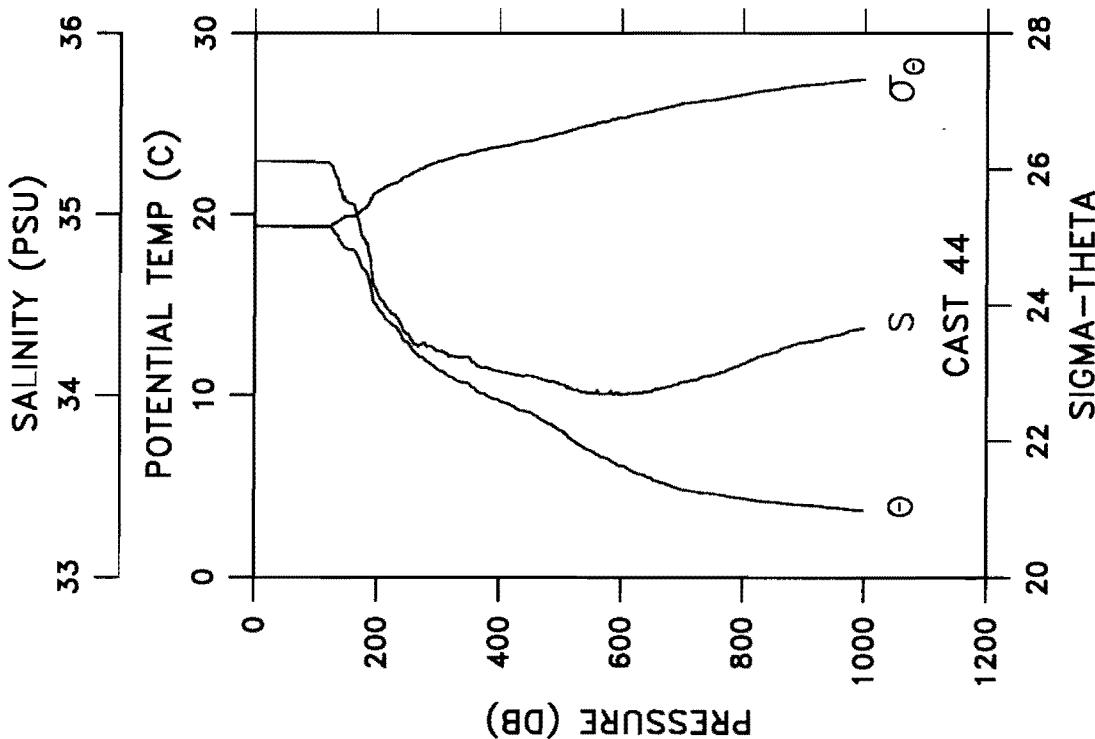
CAST CG2-91-DI -043 DATE 15 MAR 91 TIME 1638 GMT
 LAT 28°39.8N LONG 151°59.9W WEATHER 1 SEA STATE 4
 BAROMETER 31 WIND DIR 060 T SPD 22 KT VISIBILITY 7
 CLOUD 6 AMOUNT 4 DRY 17.3 WET 14.0 DEPTH 5602 M



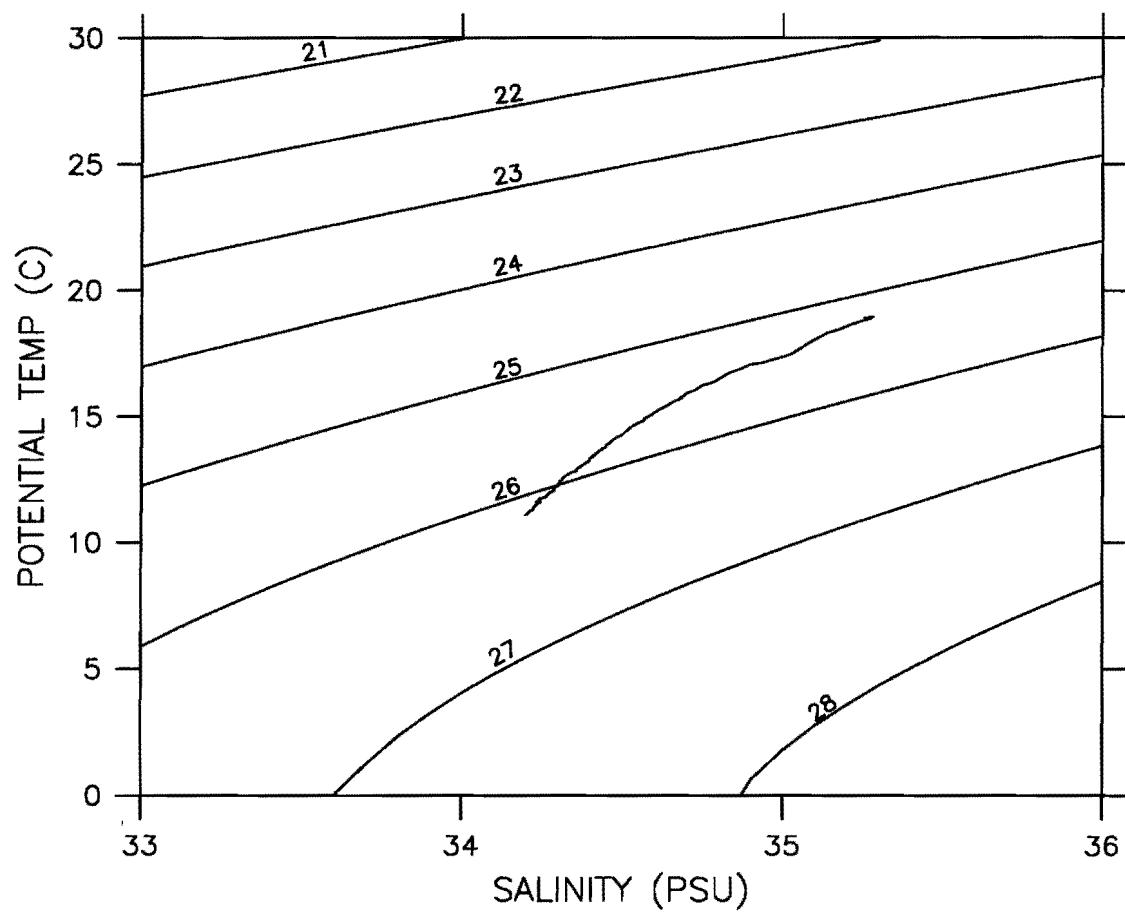
CAST CG2-91-DI -044 DATE 16 MAR 91 TIME 0137 GMT
LAT 29 20.7N LONG 151 58.3W



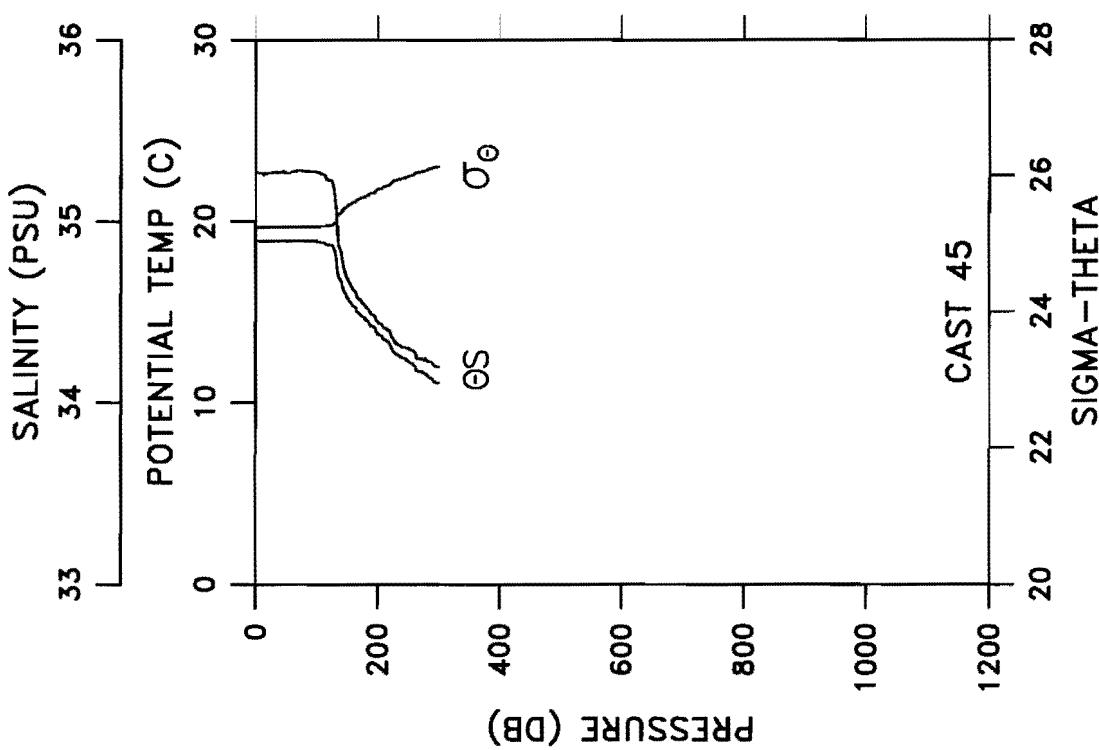
CAST CG2-91-DI -044		DATE 16 MAR 91		TIME 0137 GMT	
LAT 29 20.7N	LONG 151 58.3W	WEATHER 1	SEA STATE 4	CLOUD 8	AMOUNT 6
BAROMETER 32	WIND DIR 065 T	SPD 20 KT	VISIBILITY 9	CLOD 8	AMOUNT 6
DEPTH 5267 M	WET 15.9				
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	19.371	35.293	25.151	0.000	
10	19.370	35.294	25.152	0.028	
20	19.362	35.294	25.154	0.056	
30	19.344	35.292	25.157	0.084	
40	19.338	35.292	25.159	0.112	
50	19.322	35.291	25.162	0.140	
60	19.321	35.291	25.162	0.169	
70	19.313	35.290	25.164	0.197	
80	19.309	35.289	25.164	0.225	
90	19.311	35.290	25.164	0.253	
100	19.305	35.288	25.164	0.282	
110	19.303	35.287	25.164	0.310	
120	19.294	35.286	25.165	0.338	
130	19.000	35.233	25.200	0.366	
140	18.479	35.132	25.255	0.394	
150	18.115	35.071	25.299	0.422	
160	18.050	35.057	25.305	0.449	
170	17.576	34.964	25.349	0.476	
180	16.949	34.861	25.421	0.502	
190	15.890	34.732	25.567	0.528	
200	14.902	34.571	25.664	0.552	
250	12.951	34.343	25.894	0.665	
300	11.416	34.248	26.114	0.768	
350	10.670	34.211	26.220	0.864	
400	9.730	34.135	26.323	0.954	
450	9.061	34.110	26.412	1.041	
500	8.093	34.062	26.523	1.123	
550	6.970	34.012	26.644	1.200	
600	6.133	34.003	26.748	1.270	
650	5.468	34.021	26.844	1.337	
700	4.824	34.075	26.962	1.397	
750	4.618	34.113	27.015	1.454	
800	4.367	34.175	27.092	1.508	
900	3.993	34.295	27.226	1.606	
1000	3.708	34.375	27.318	1.694	
1500	2.621	34.551	27.561	2.046	
2000	1.920	34.614	27.669	2.325	
2500	1.551	34.646	27.723	2.569	
3000	1.347	34.665	27.752	2.796	
3500	1.230	34.678	27.771	3.018	
4000	1.161	34.683	27.780	3.241	
4500	1.110	34.687	27.786	3.468	
5000	1.065	34.690	27.792	3.702	
5434	1.052	34.691	27.794	3.911	



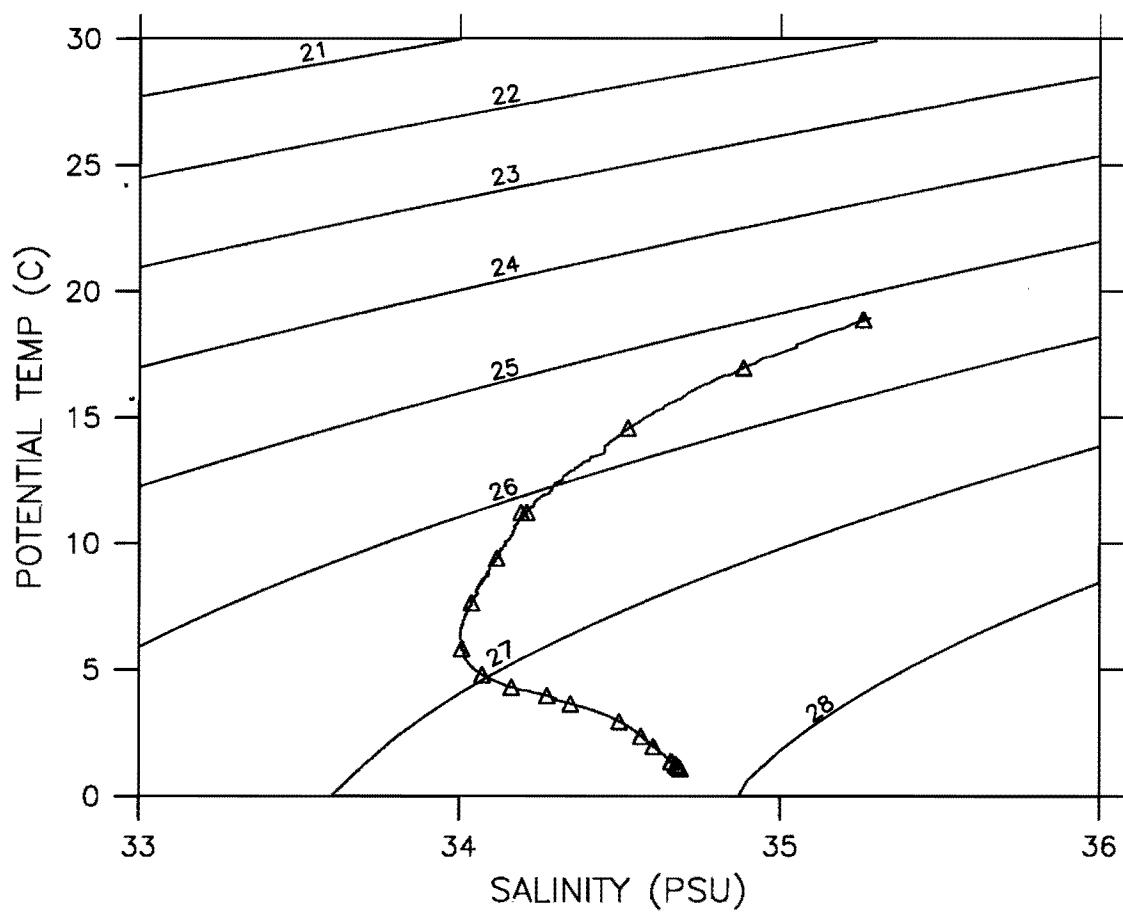
CAST CG2-91-DI -045 DATE 16 MAR 91 TIME 0918 GMT
LAT 30 00.0N LONG 152 00.0W



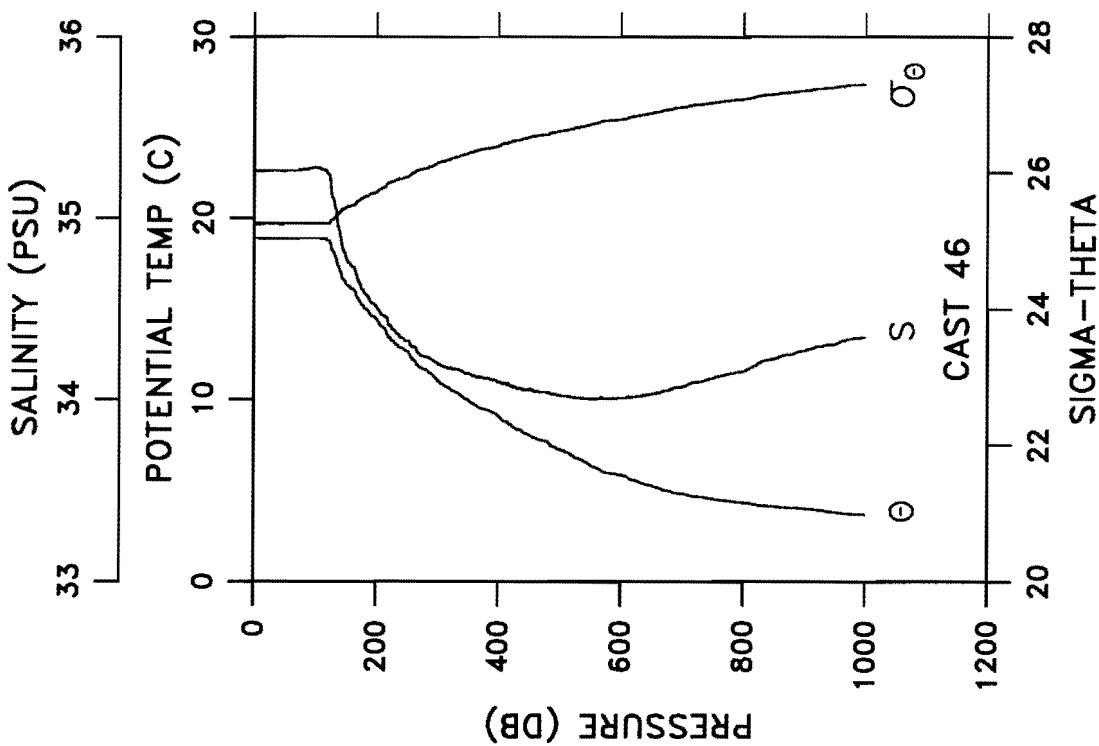
CAST CG2-91-DI-045 DATE 16 MAR 91 TIME 0918 GMT
 LAT 30 00.0N LONG 152 00.0W WEATHER 1 SEA STATE 4
 BAROMETER 34 WIND DIR 050 T SPD 20 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 16.7 WET 14.5 DEPTH 5397 M



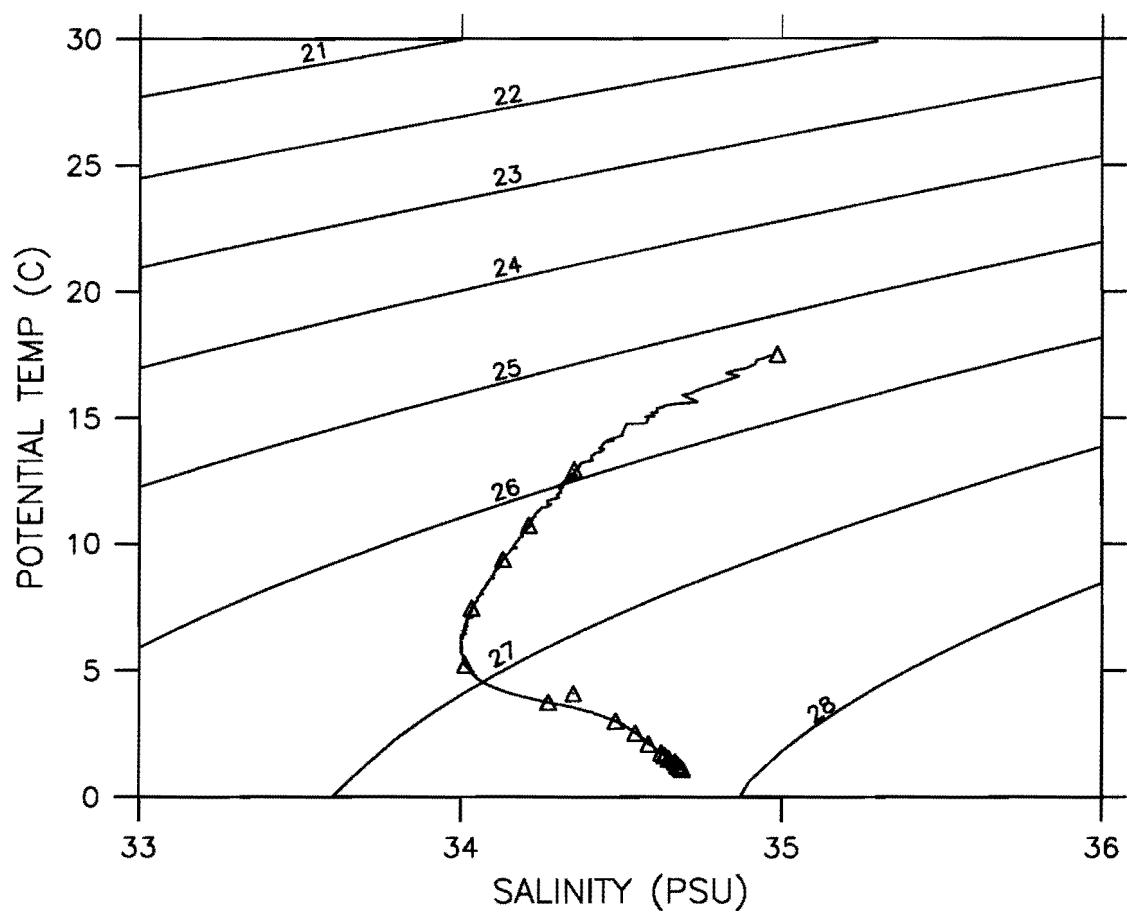
CAST CG2-91-DI -046 DATE 16 MAR 91 TIME 1425 GMT
LAT 30 00.0N LONG 152 00.5W



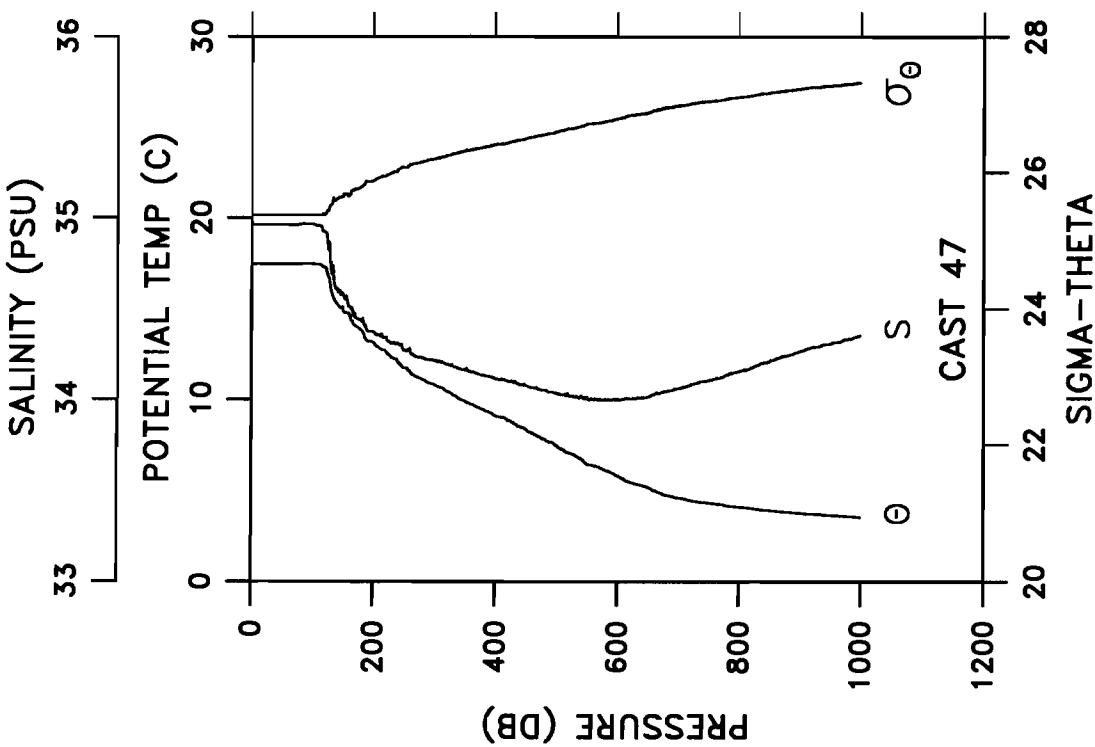
CAST CG2-91-DI -046		DATE 16 MAR 91	TIME 1425 GMT	WEATHER 1	SEA STATE 4
LAT 30 00.0N	LONG 152 00.5W				
BAROMETER 33	WIND DIR 030 T	SPD 16 KT	VISIBILITY 7		
CLOUD 0	AMOUNT 4	DRY 16.5	WET 14.1	DEPTH 5400 M	
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	18.897	35.261	25.248	0.000	
10	18.890	35.260	25.249	0.027	
20	18.888	35.261	25.250	0.054	
30	18.889	35.262	25.251	0.081	
40	18.901	35.265	25.250	0.109	
50	18.891	35.261	25.250	0.136	
60	18.892	35.263	25.251	0.163	
70	18.891	35.262	25.250	0.191	
80	18.916	35.272	25.251	0.218	
90	18.913	35.273	25.253	0.245	
100	18.918	35.280	25.257	0.273	
110	18.882	35.271	25.259	0.300	
120	18.794	35.248	25.264	0.328	
130	18.143	35.104	25.318	0.355	
140	17.122	34.919	25.424	0.381	
150	16.422	34.788	25.488	0.407	
160	16.117	34.735	25.518	0.432	
170	15.561	34.657	25.584	0.457	
180	15.069	34.591	25.643	0.481	
190	14.693	34.544	25.688	0.505	
200	14.443	34.513	25.717	0.528	
250	12.655	34.322	25.937	0.639	
300	11.035	34.197	26.145	0.740	
350	9.993	34.144	26.285	0.833	
400	9.105	34.098	26.396	0.920	
450	8.059	34.053	26.522	1.002	
500	7.239	34.024	26.617	1.079	
550	6.405	34.004	26.714	1.152	
600	5.830	34.008	26.790	1.219	
650	5.257	34.029	26.876	1.283	
700	4.805	34.070	26.960	1.343	
750	4.523	34.117	27.028	1.400	
800	4.312	34.154	27.081	1.453	
900	3.985	34.268	27.206	1.552	
1000	3.655	34.345	27.300	1.641	
1500	2.610	34.544	27.556	1.998	
2000	1.889	34.613	27.670	2.276	
2500	1.552	34.644	27.721	2.518	
3000	1.341	34.665	27.752	2.747	
3500	1.219	34.676	27.771	2.969	
4000	1.150	34.683	27.780	3.191	
4500	1.114	34.687	27.786	3.418	
5000	1.096	34.688	27.789	3.653	
5111	1.093	34.690	27.790	3.707	



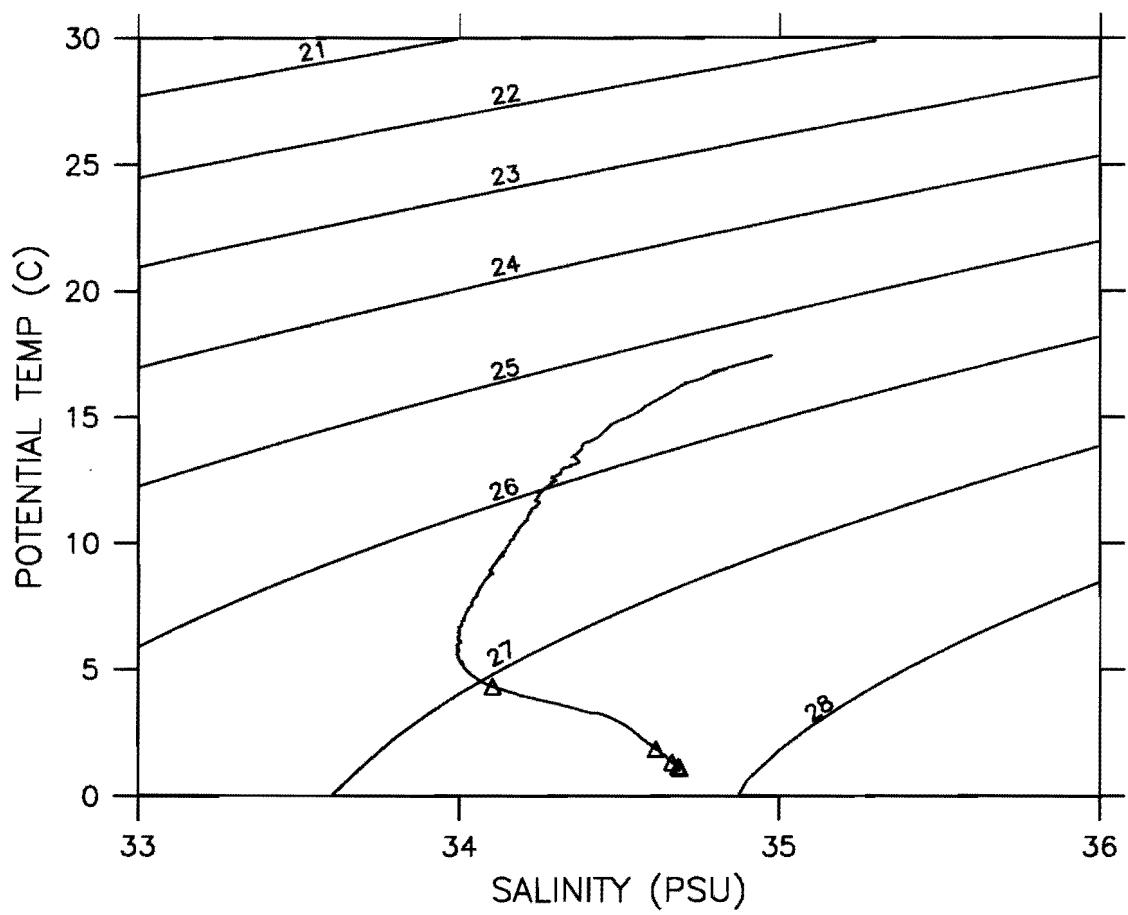
CAST CG2-91-DI -047 DATE 17 MAR 91 TIME 1030 GMT
LAT 30 39.8N LONG 151 59.5W



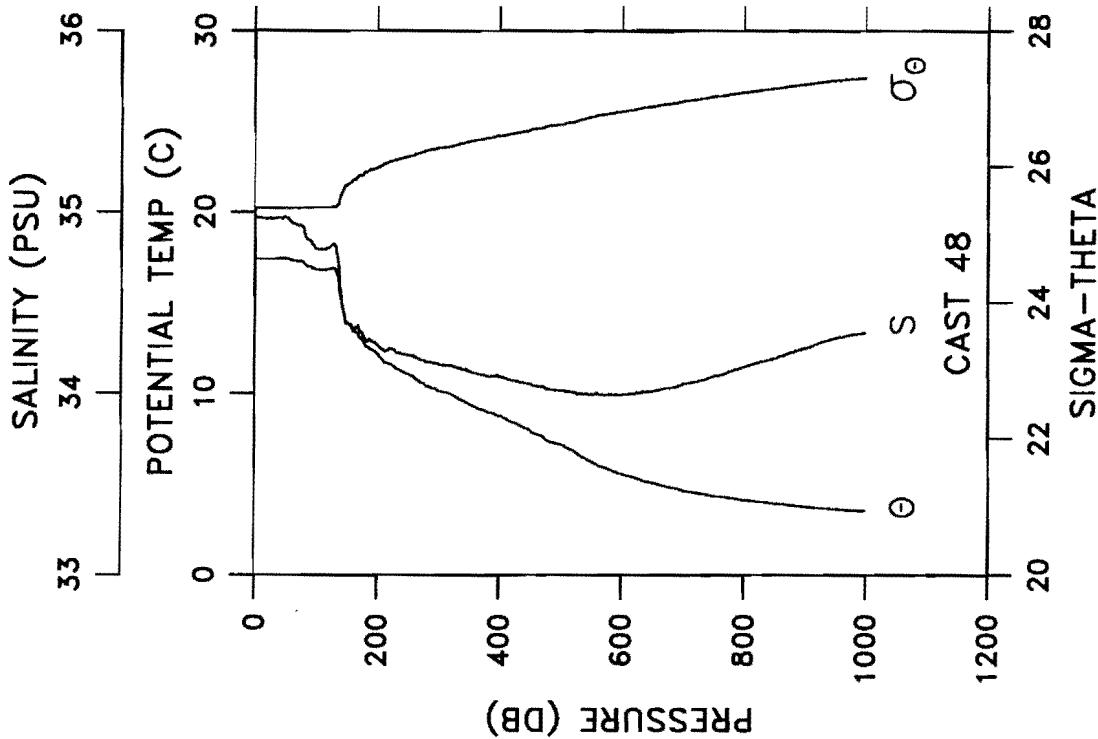
CAST CG2-91-DI -047		DATE 17 MAR 91	TIME 1030 GMT
LAT 30 39.8N	LONG 151 59.5W	WEATHER 2	SEA STATE 4
BAROMETER 32	WIND DIR 045 T	SPD 17 KT	VISIBILITY 8
CLOUD 8	AMOUNT 8	DRY 15.0	WET 12.4
		DEPTH 5449 M	
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH
0	17.457	34.964	25.378
10	17.465	34.964	25.376
20	17.458	34.964	25.378
30	17.458	34.964	25.378
40	17.458	34.963	25.377
50	17.443	34.959	25.377
60	17.446	34.960	25.378
70	17.441	34.959	25.378
80	17.450	34.962	25.378
90	17.467	34.966	25.377
100	17.462	34.967	25.379
110	17.441	34.958	25.378
120	17.277	34.924	25.391
130	16.157	34.747	25.518
140	15.278	34.611	25.611
150	15.079	34.585	0.363
160	14.715	34.513	0.387
170	14.082	34.474	25.764
180	13.814	34.433	25.788
190	13.215	34.379	0.479
200	13.144	34.372	25.870
250	11.719	34.269	0.500
300	10.819	34.215	26.197
350	9.933	34.164	26.311
400	9.097	34.115	26.410
450	8.354	34.078	0.879
500	7.463	34.035	26.497
550	6.436	34.015	26.594
600	5.802	34.004	26.790
650	5.175	34.014	26.874
700	4.590	34.061	0.962
750	4.310	34.105	26.977
800	4.092	34.154	27.042
900	3.756	34.265	27.104
1000	3.525	34.352	1.246
1500	2.526	34.547	1.305
2000	1.821	34.616	1.361
2500	1.496	34.650	27.678
3000	1.307	34.668	27.729
3500	1.205	34.678	27.773
4000	1.147	34.685	27.782
4500	1.111	34.688	27.787
5000	1.091	34.690	27.790
5420	1.081	34.691	27.791



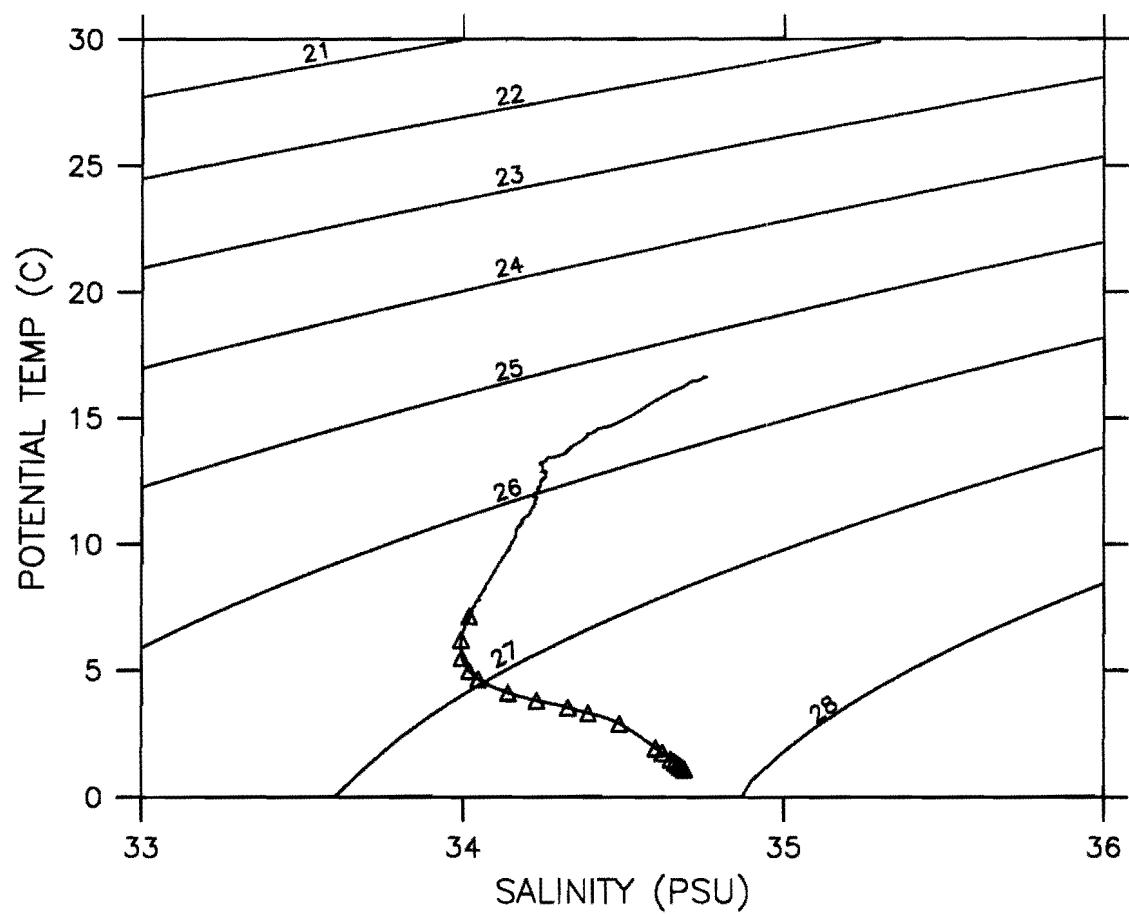
CAST CG2-91-DI -048 DATE 17 MAR 91 TIME 1841 GMT
LAT 31 20.1N LONG 152 00.1W

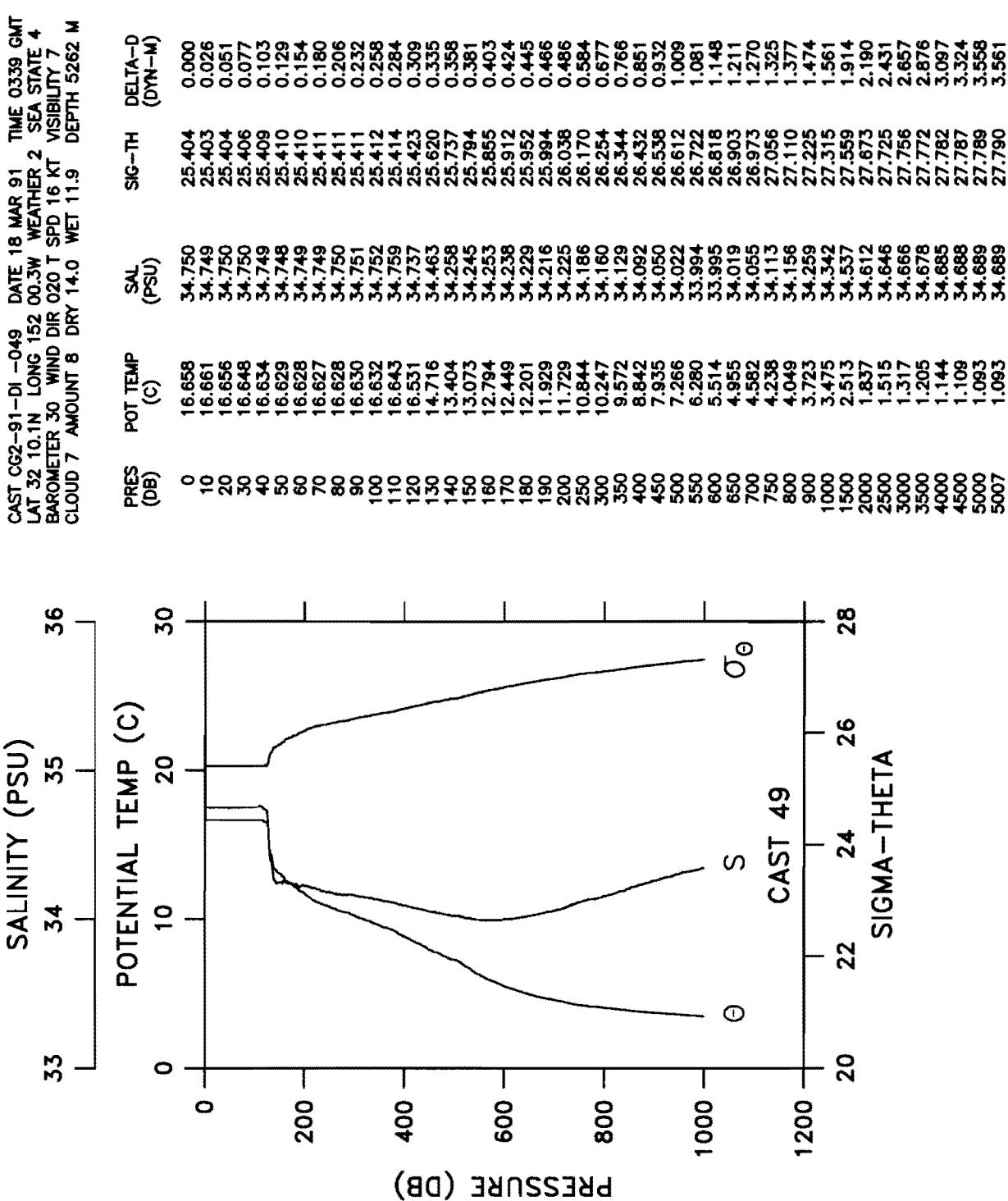


CAST CG2-91-DI -048 DATE 17 MAR 91 TIME 1841 GMT
 LAT 31 20.1N LONG 152 00.1W WEATHER 2 SEA STATE 4
 BAROMETER 33 WIND DIR 030 T SPD 18 KT VISIBILITY 8
 CLOUD 6 AMOUNT 8 DRY 14.8 WET 12.2 DEPTH 5465 M

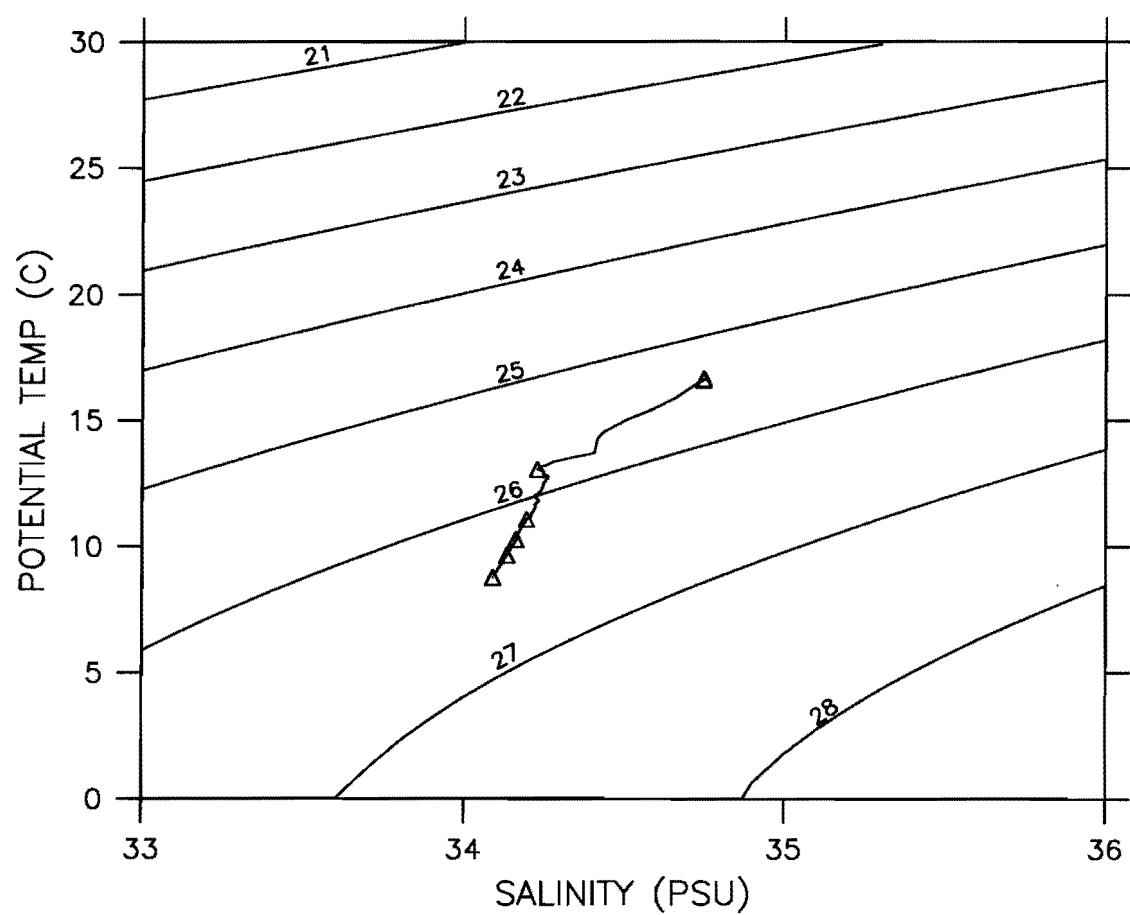


CAST CG2-91-DI -049 DATE 18 MAR 91 TIME 0339 GMT
LAT 32 10.1N LONG 152 00.3W

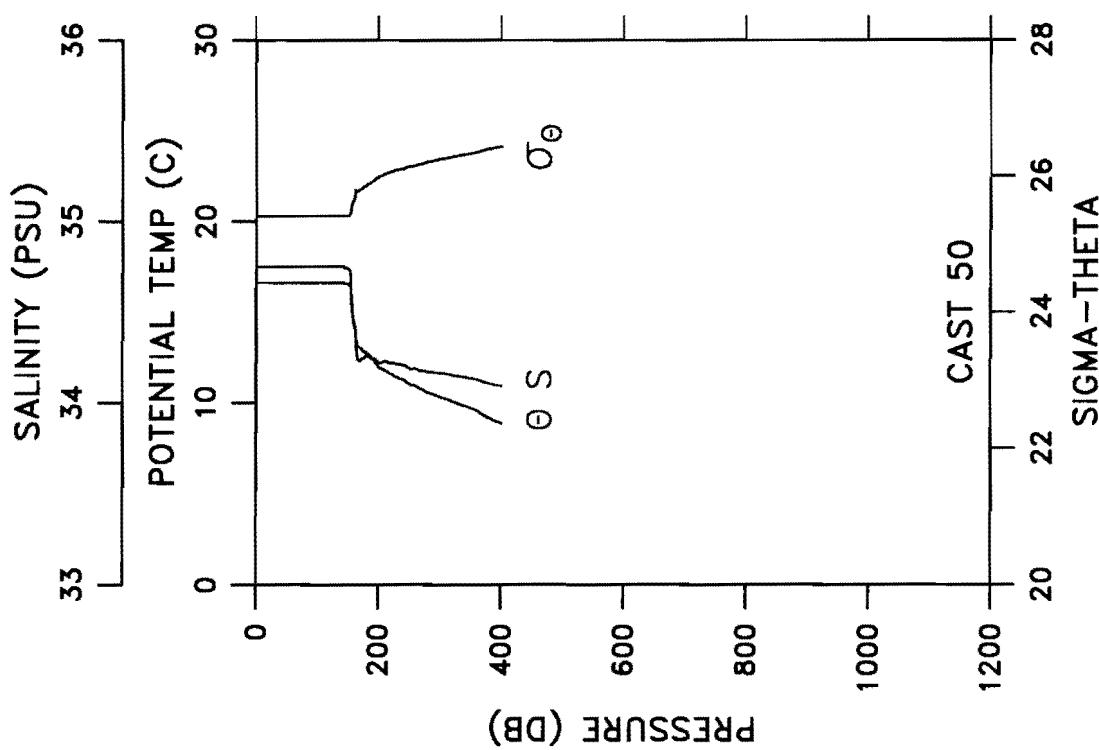




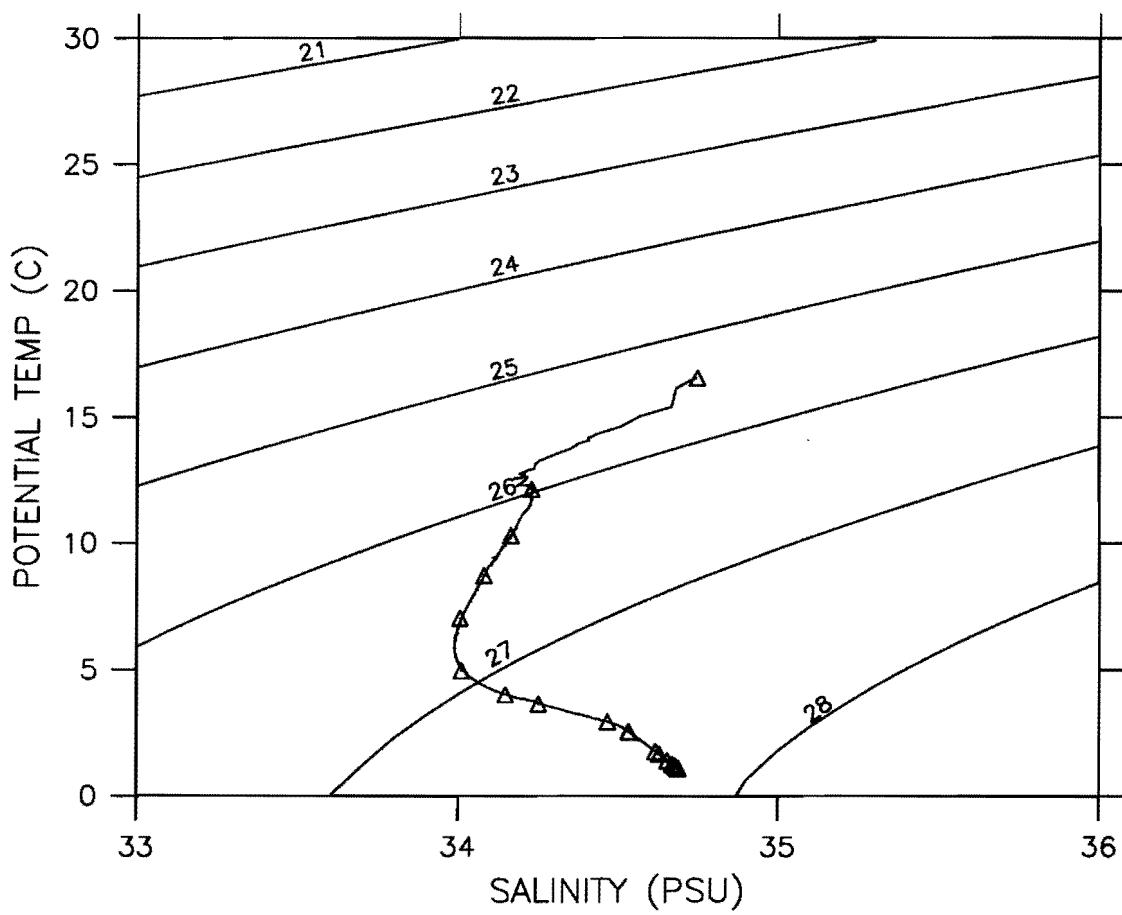
CAST CG2-91-DI -050 DATE 18 MAR 91 TIME 0747 GMT
LAT 32 10.5N LONG 152 00.6W

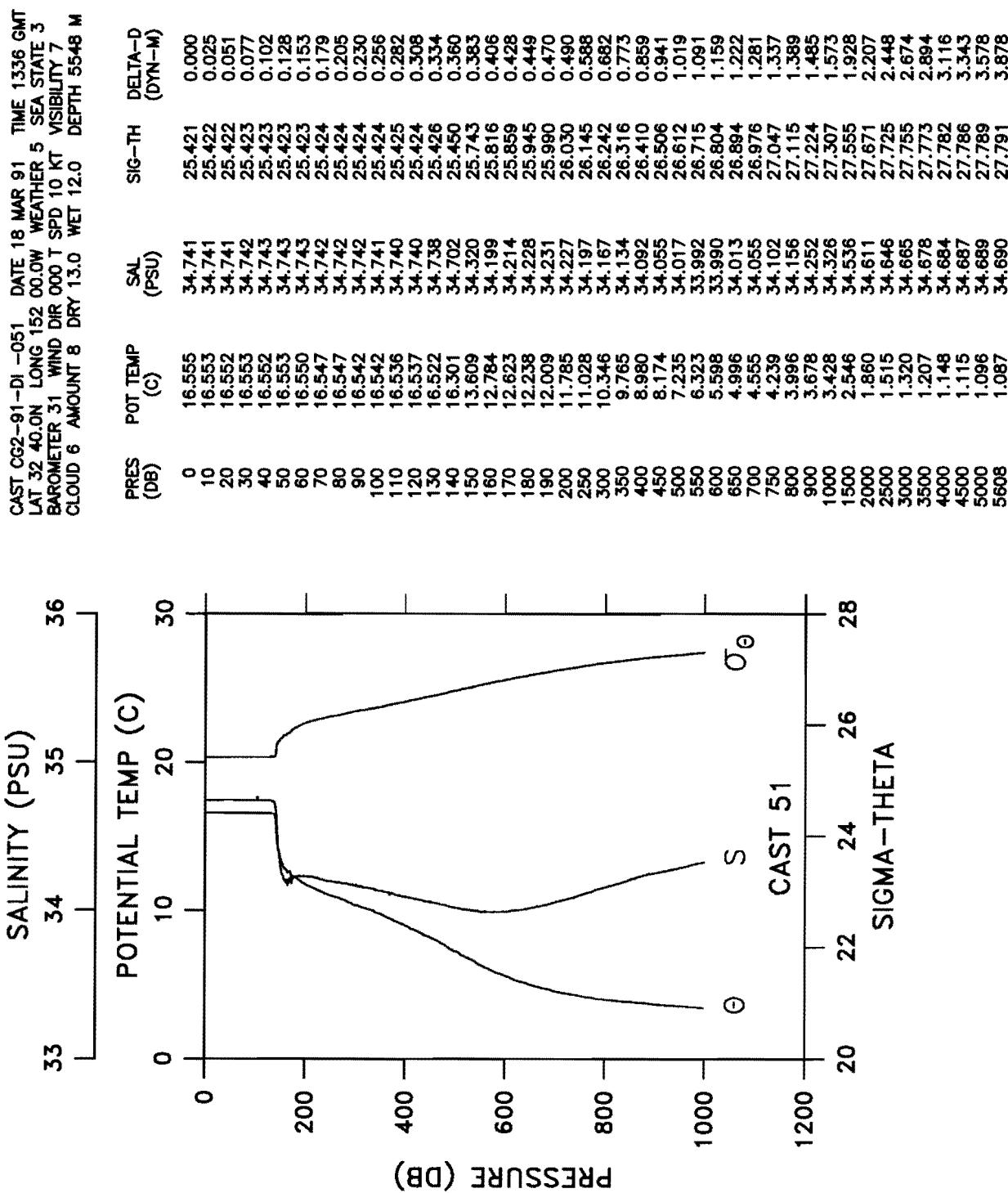


CAST CG2-91-DI -050 DATE 18 MAR 91 TIME 0747 GMT
 LAT 32 10.5N LONG 152 00.6W WEATHER 2 SEA STATE 4
 BAROMETER 32 WIND DIR 015 T SPD 08 KT VISIBILITY 7
 CLOUD 7 AMOUNT 7 DRY 14.2 WET 12.8 DEPTH 5256 M

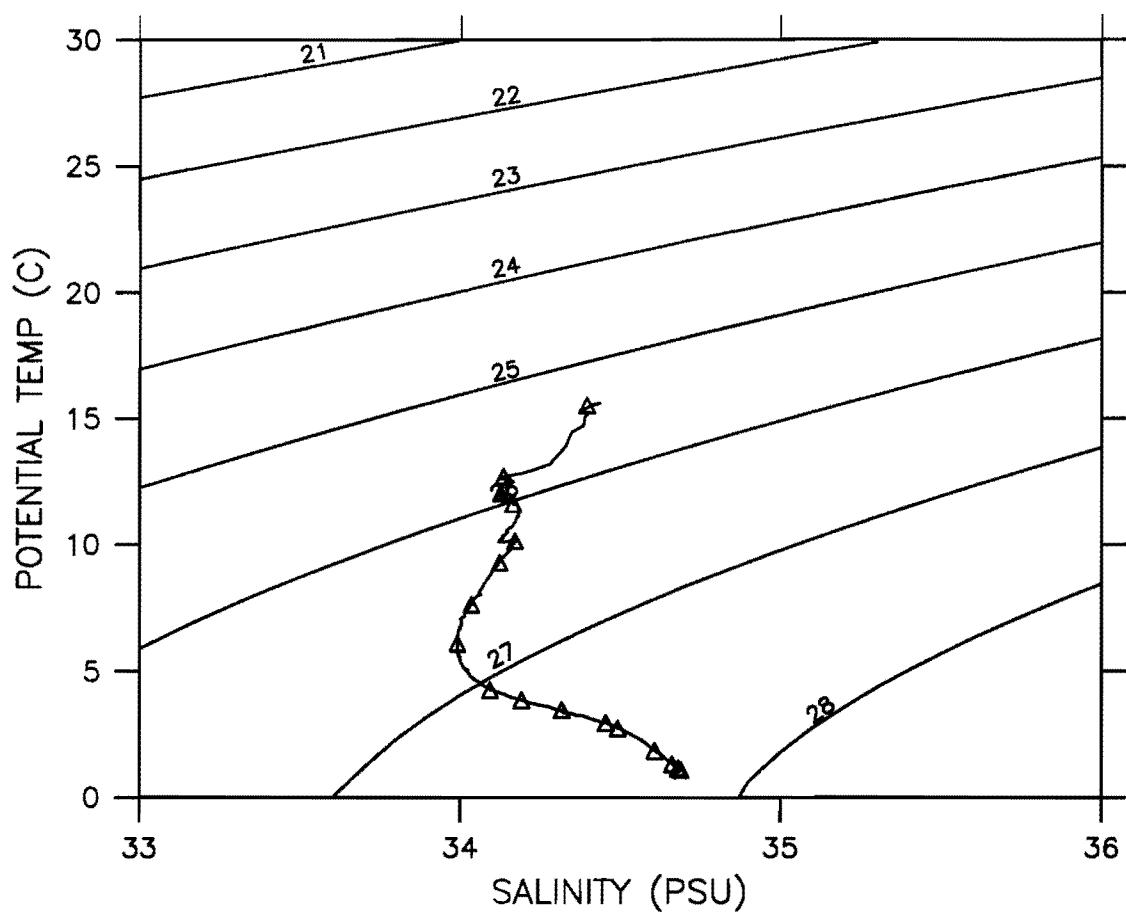


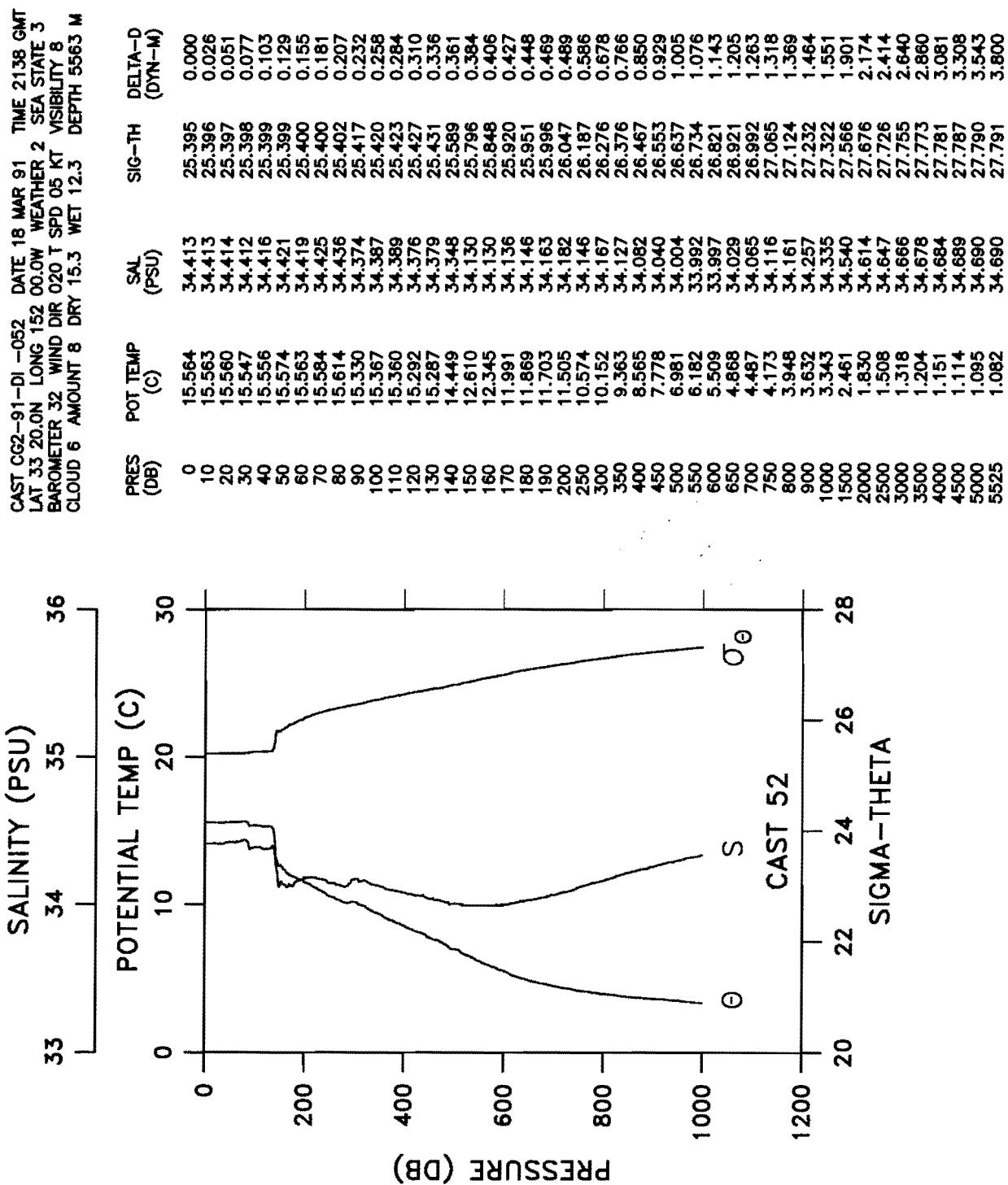
CAST CG2-91-DI -051 DATE 18 MAR 91 TIME 1336 GMT
LAT 32 40.0N LONG 152 00.0W



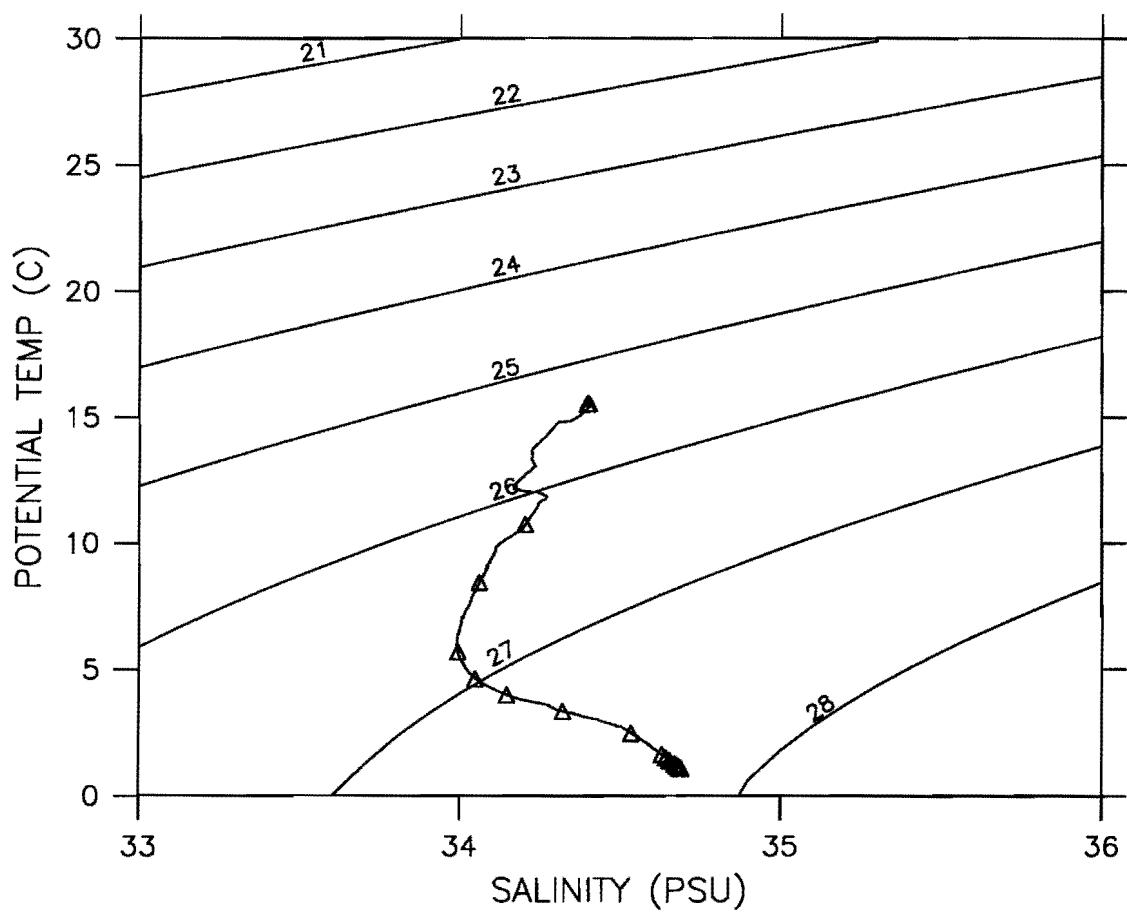


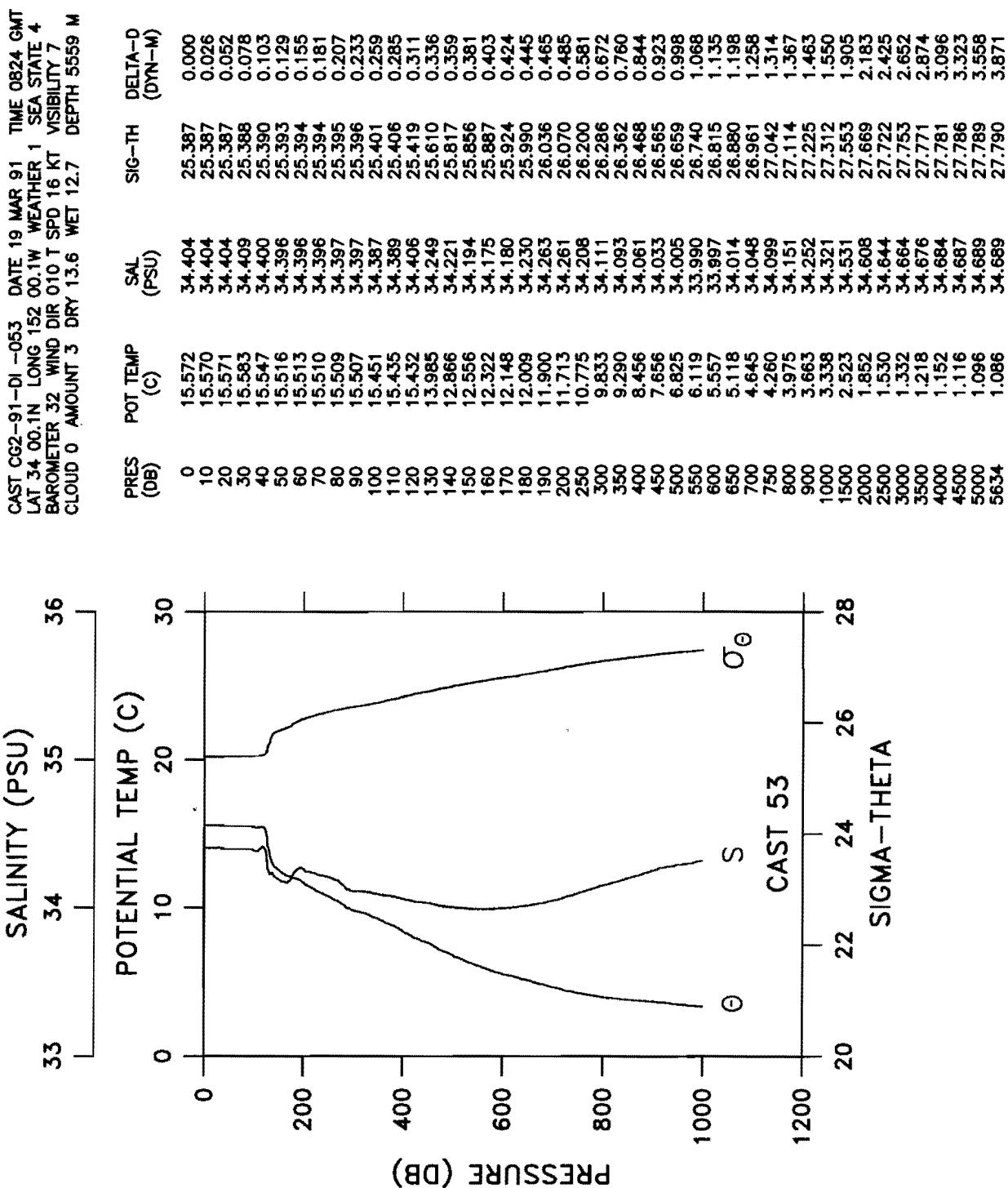
CAST CG2-91-DI -052 DATE 18 MAR 91 TIME 2138 GMT
LAT 33 20.0N LONG 152 00.0W



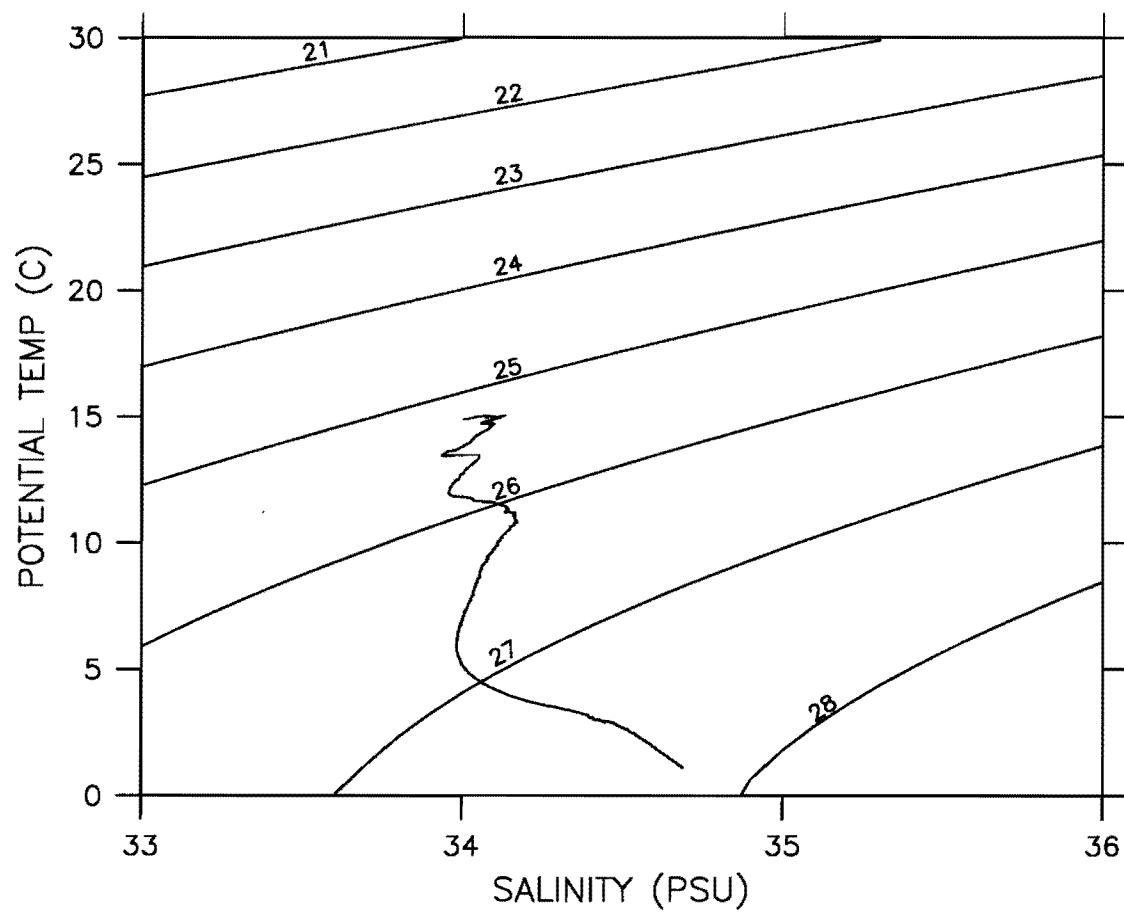


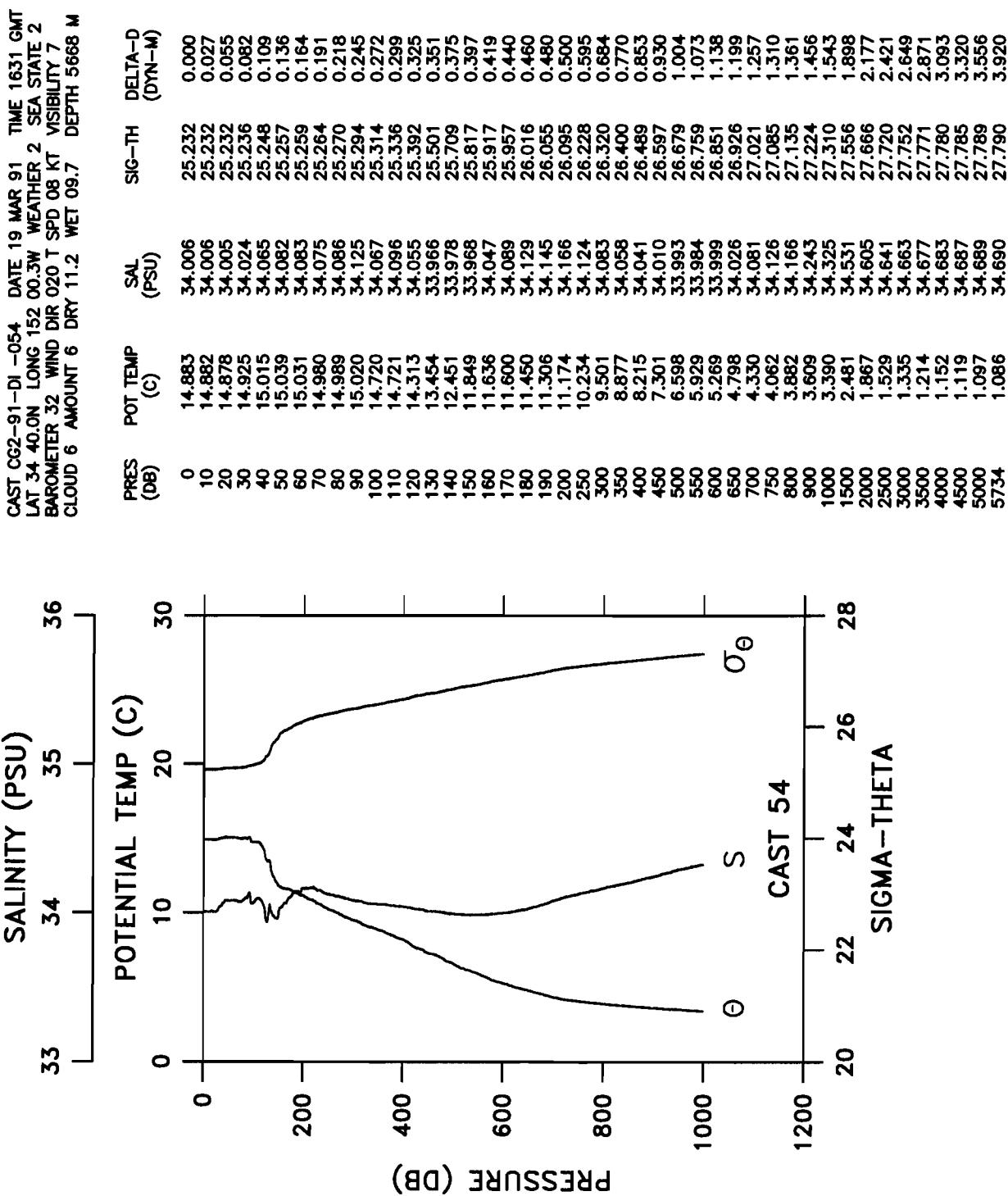
CAST CG2-91-DI -053 DATE 19 MAR 91 TIME 0824 GMT
LAT 34 00.1N LONG 152 00.1W



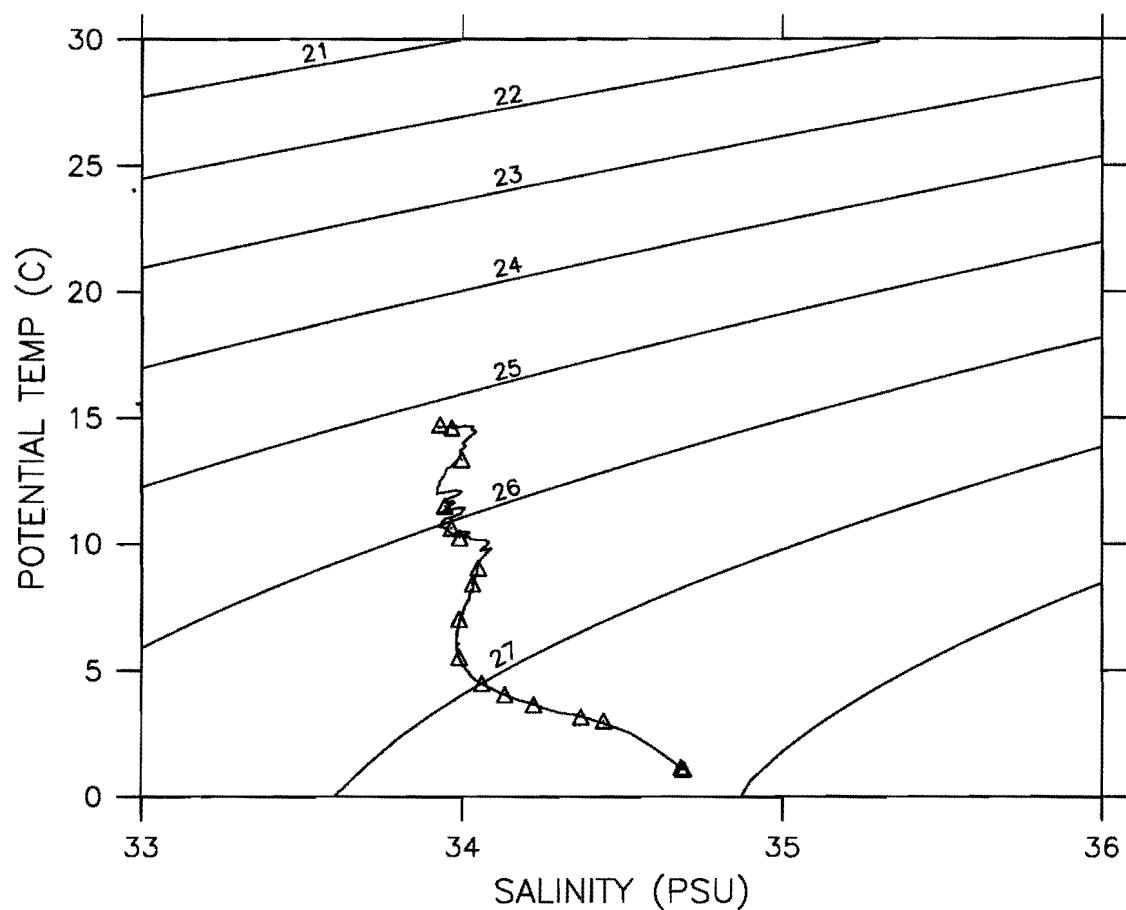


CAST CG2-91-DI -054 DATE 19 MAR 91 TIME 1631 GMT
LAT 34 40.0N LONG 152 00.3W

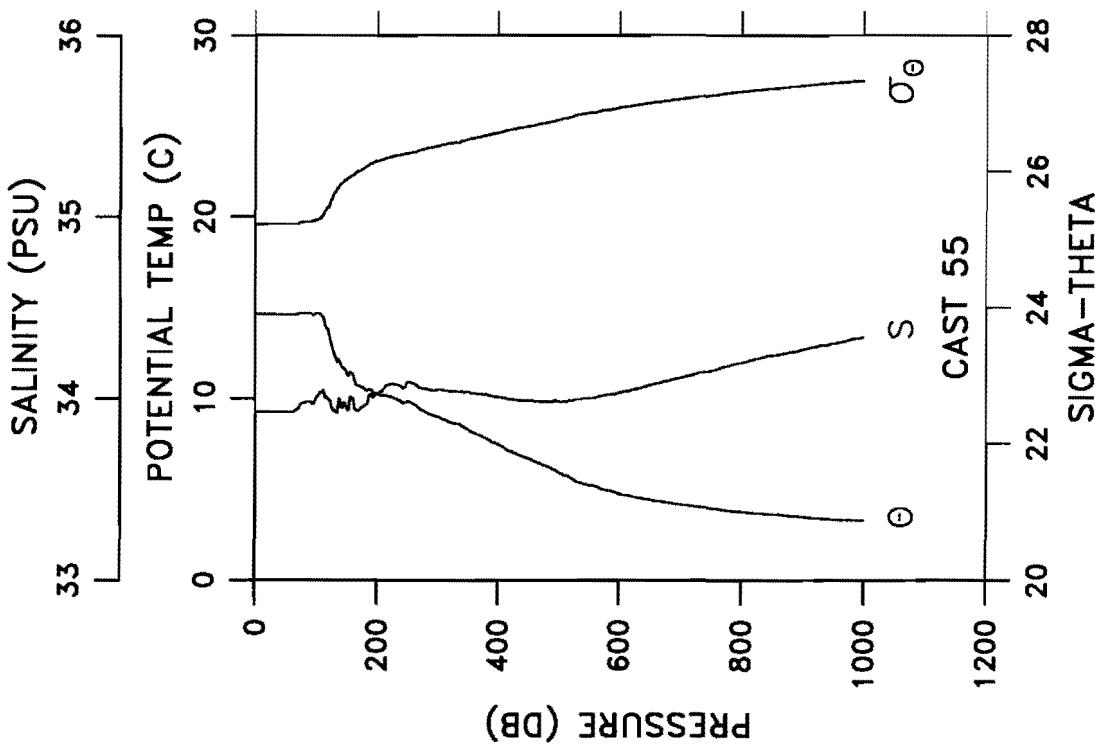




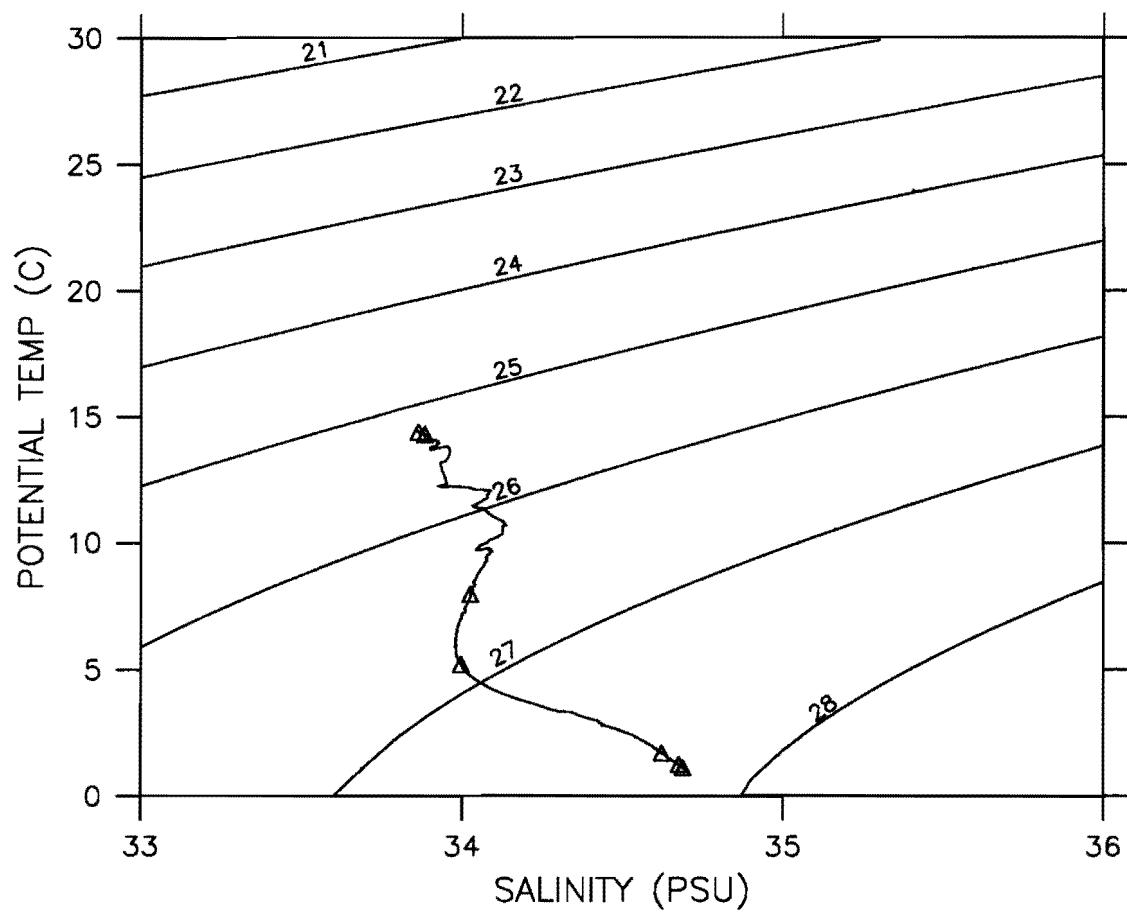
CAST CG2-91-DI -055 DATE 20 MAR 91 TIME 0224 GMT
LAT 35 36.5N LONG 152 00.4W



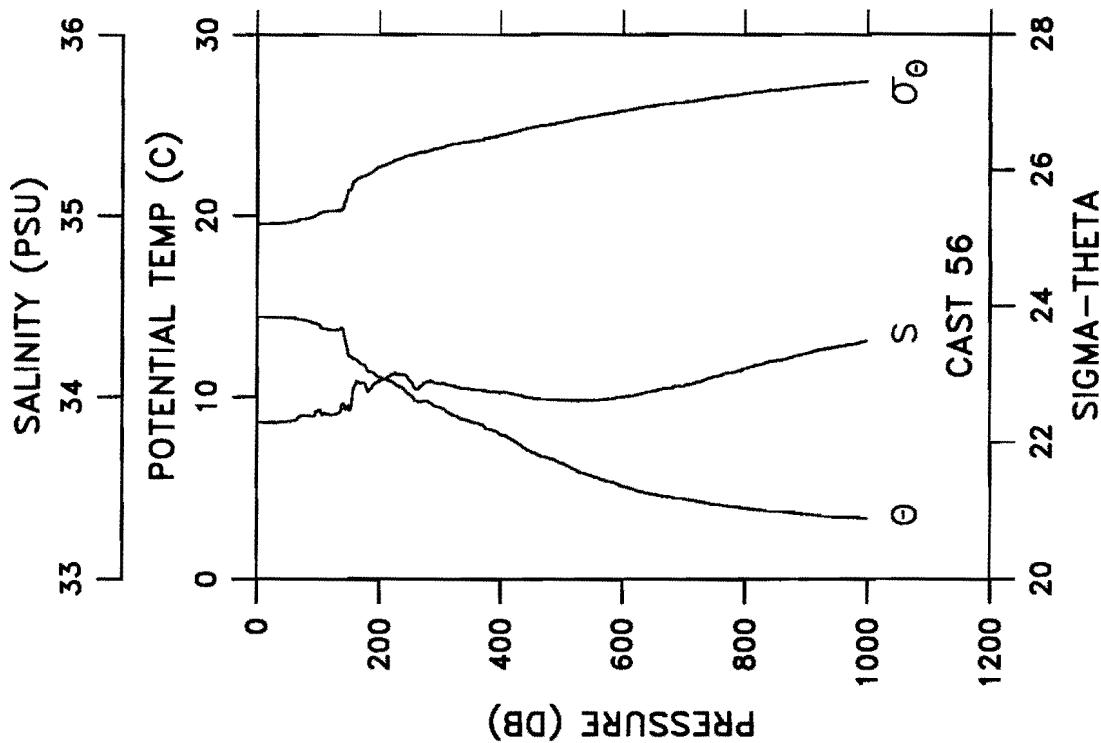
CAST CG2-91-DI -055		DATE 20 MAR 91		TIME 0224 GMT	
LAT 35 36.5N	LONG 152 00.4W	WEATHER 2	SEA STATE 3	BAROMETER 32	WIND DIR 000 T SPD 04 KT VISIBILITY 7
CLOUD 2	AMOUNT 8	DRY 14.0	WET 10.8	DEPTH 5705 M	
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTAD (DYN-M)	
0	14.649	33.925	25.220	0.000	
10	14.647	33.925	25.220	0.027	
20	14.642	33.925	25.221	0.055	
30	14.630	33.925	25.224	0.082	
40	14.624	33.925	25.225	0.110	
50	14.620	33.925	25.226	0.137	
60	14.616	33.927	25.228	0.165	
70	14.641	33.942	25.234	0.192	
80	14.684	33.975	25.251	0.219	
90	14.686	33.982	25.256	0.247	
100	14.671	34.003	25.276	0.274	
110	14.509	34.029	25.300	0.301	
120	13.744	33.994	25.463	0.327	
130	12.366	33.929	25.688	0.351	
140	11.887	33.976	25.816	0.374	
150	11.433	33.952	25.881	0.396	
160	11.354	34.002	25.934	0.417	
170	10.683	35.929	25.998	0.437	
180	10.488	33.956	26.054	0.457	
190	10.460	34.022	26.110	0.477	
200	10.195	34.025	26.158	0.496	
250	9.838	34.089	26.268	0.588	
300	8.975	34.047	26.376	0.676	
350	8.284	34.034	26.473	0.758	
400	7.470	34.006	26.571	0.837	
450	6.698	33.987	26.662	0.911	
500	5.946	33.981	26.754	0.980	
550	5.225	34.001	26.857	1.045	
600	4.746	34.030	26.935	1.106	
650	4.422	34.071	27.003	1.163	
700	4.155	34.111	27.063	1.217	
750	3.953	34.149	27.114	1.268	
800	3.755	34.195	27.171	1.317	
900	3.461	34.266	27.256	1.409	
1000	3.272	34.337	27.330	1.493	
1500	2.460	34.531	27.558	1.842	
2000	1.869	34.604	27.665	2.121	
2500	1.534	34.641	27.719	2.364	
3000	1.335	34.662	27.751	2.593	
3500	1.219	34.676	27.770	2.815	
4000	1.158	34.682	27.779	3.037	
4500	1.123	34.686	27.785	3.265	
5000	1.099	34.688	27.788	3.501	
5759	1.088	34.690	27.790	3.879	



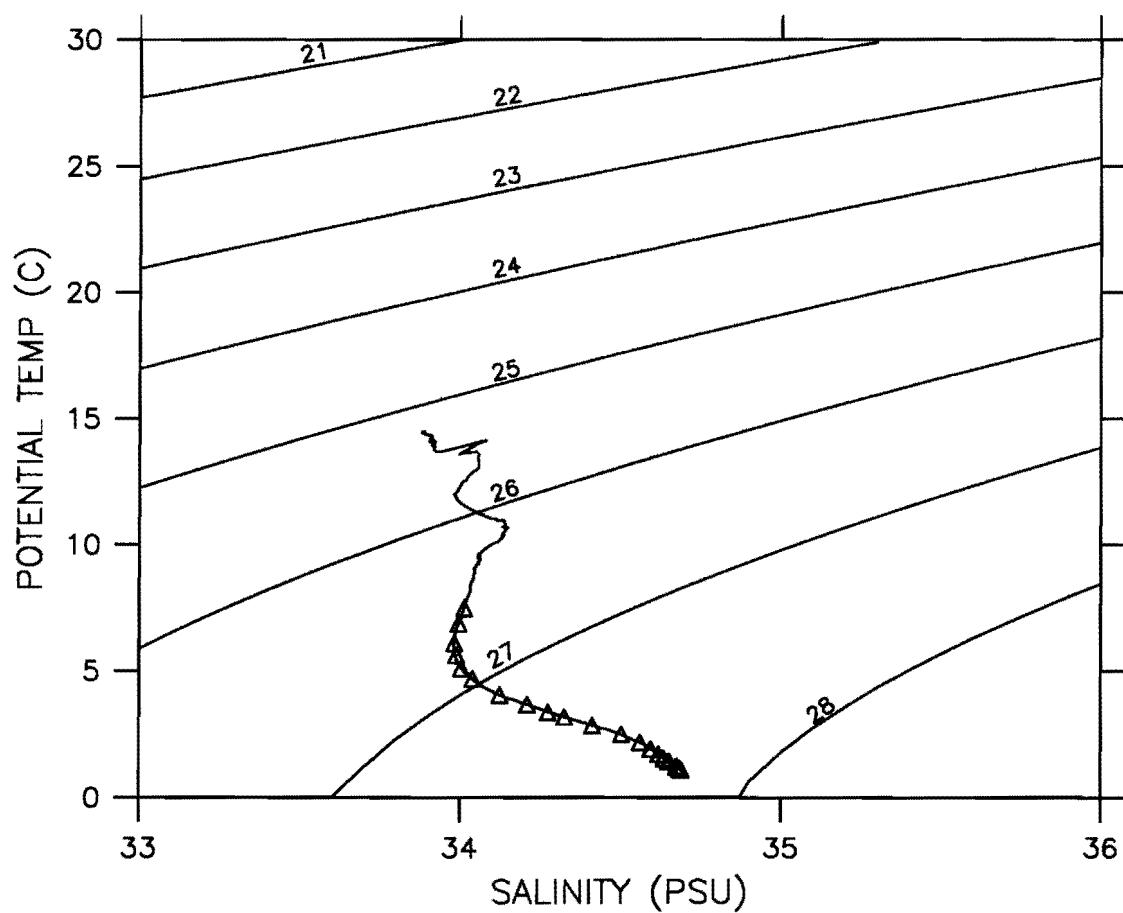
CAST CG2-91-DI -056 DATE 20 MAR 91 TIME 1058 GMT
LAT 36 17.8N LONG 152 02.7W



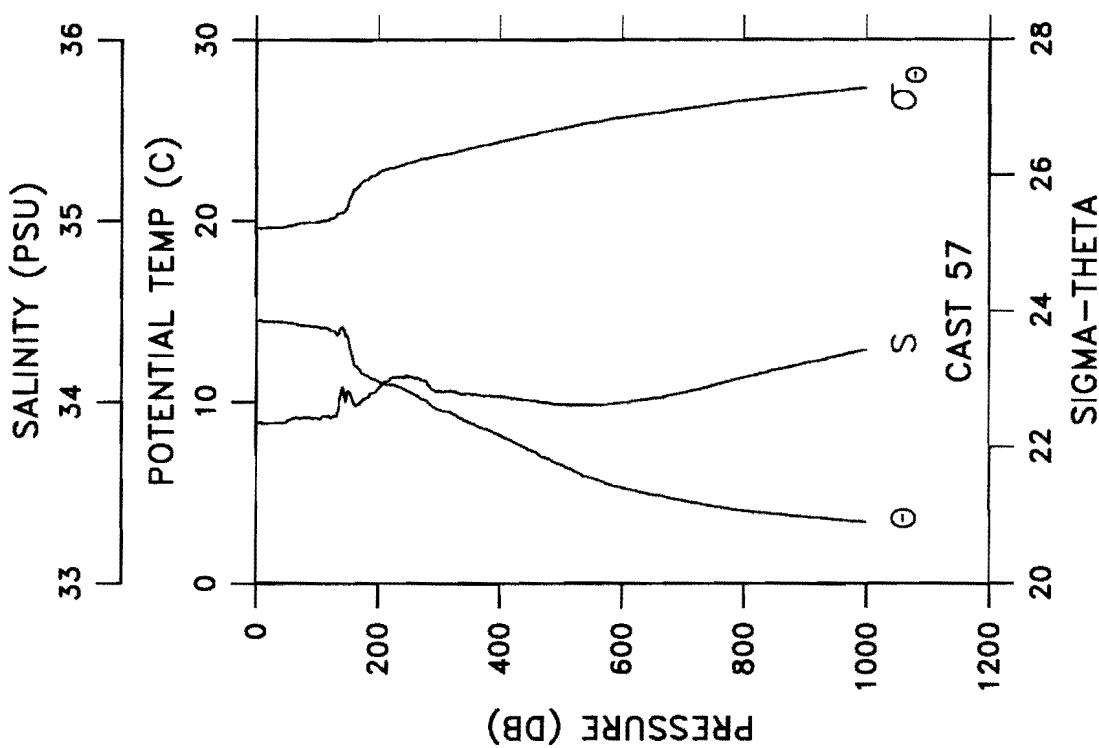
CAST CG2-91-DI -056	DATE 20 MAR 91	TIME 1058 GMT
LAT 36 17.8N	LONG 152 02.7W	WEATHER 1
BAROMETER 33	WIND DIR 050 T	SEA STATE 0
CLOUD 6	AMOUNT 6	VISIBILITY 7
	DRY 11.5	WET 08.8
	DEPTH 5629 M	
PRES (DB)	POT TEMP (C)	SAL (PSU)
0	14.448	33.863
10	14.440	33.861
20	14.417	33.860
30	14.412	33.861
40	14.403	33.861
50	14.384	33.865
60	14.327	33.868
70	14.264	33.893
80	14.229	33.897
90	14.113	33.893
100	13.996	33.924
110	13.779	33.910
120	13.690	33.901
130	13.691	33.906
140	13.750	33.959
150	12.257	33.931
160	12.093	34.068
170	11.842	34.079
180	11.507	34.039
190	11.354	34.067
200	11.107	34.087
250	10.140	34.090
300	9.416	34.074
350	8.685	34.045
400	7.935	34.025
450	7.013	33.998
500	6.384	33.982
550	5.677	33.981
600	5.108	34.001
650	4.660	34.035
700	4.425	34.062
750	4.108	34.113
800	3.887	34.158
900	3.561	34.241
1000	3.317	34.309
1500	2.439	34.522
2000	1.859	34.602
2500	1.541	34.639
3000	1.346	34.661
3500	1.225	34.675
4000	1.158	34.683
4500	1.122	34.686
5000	1.100	34.688
5654	1.090	34.689



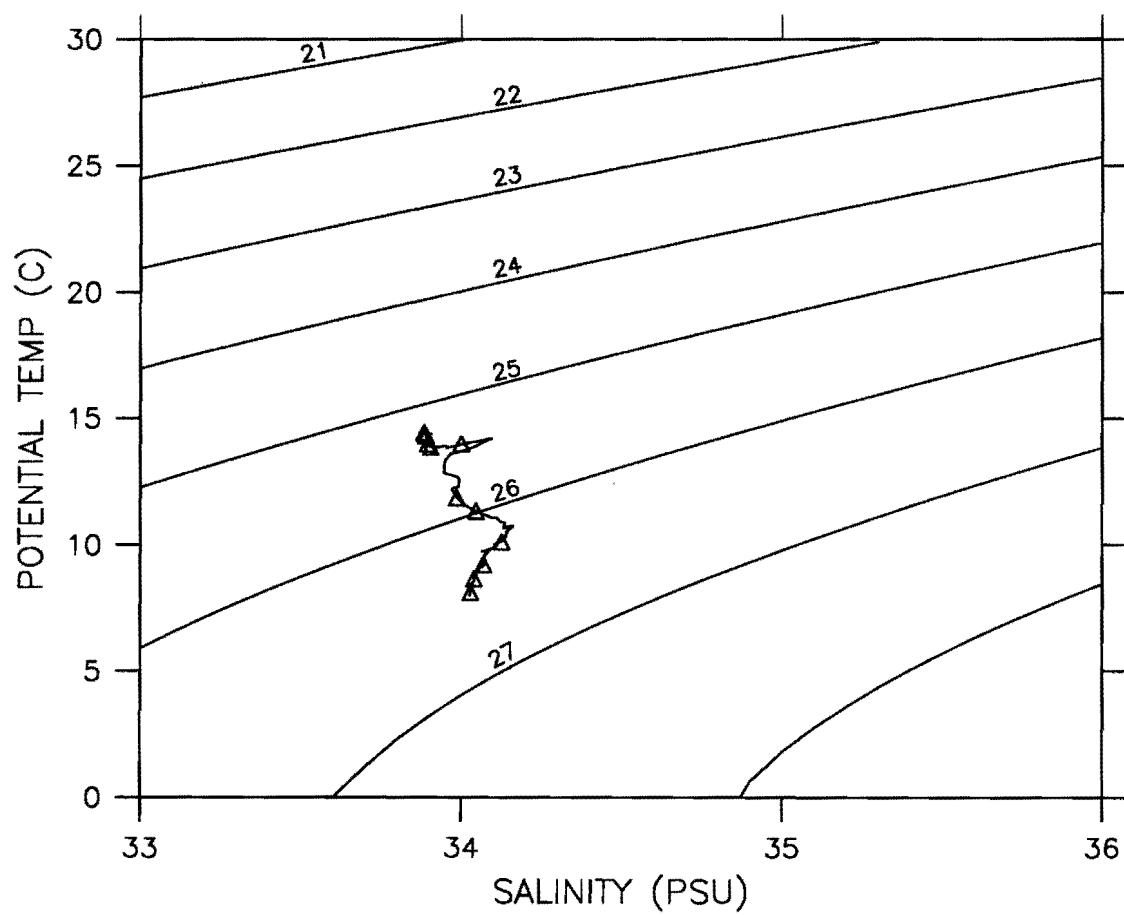
CAST CG2-91-DI -057 DATE 21 MAR 91 TIME 0715 GMT
LAT 37 11.0N LONG 151 58.0W



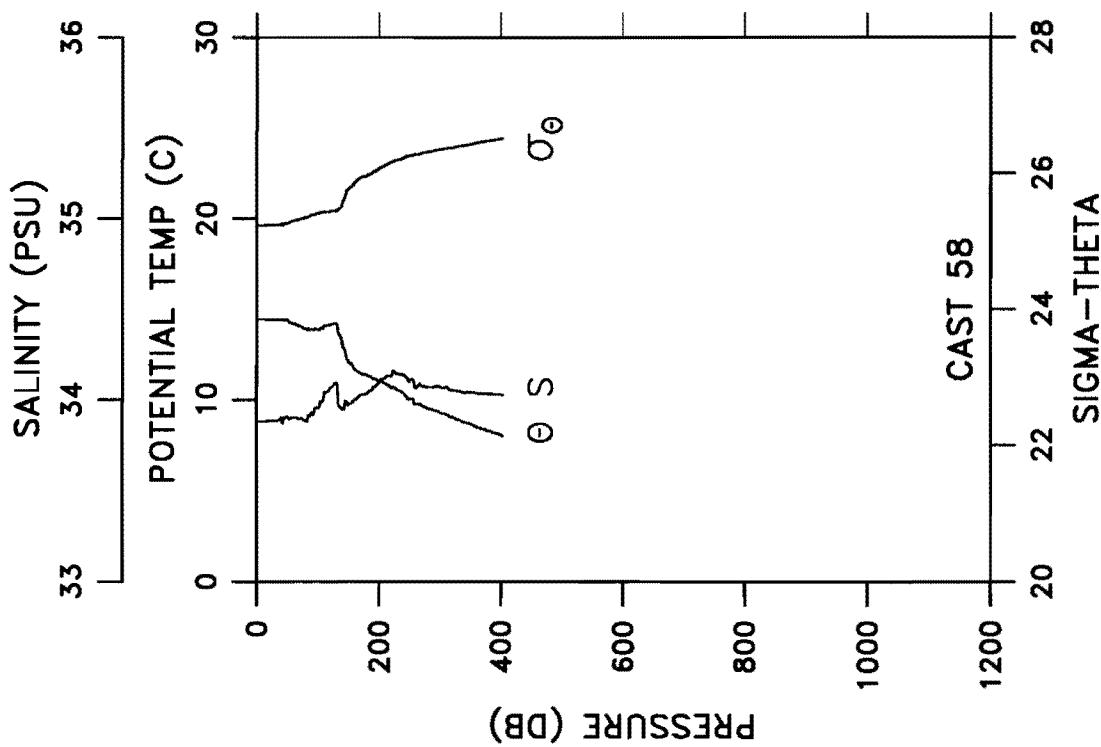
CAST CG2-91-DI -057 DATE 21 MAR 91 TIME 0715 GMT
 LAT 37 11.0N LONG 151 58.0W WEATHER 2 SEA STATE 1
 BAROMETER 31 WIND DIR 000 KT SPD 06 KT VISIBILITY 8
 CLOUD 0 AMOUNT 7 DRY 12.8 WET 09.4 DEPTH 5572 M



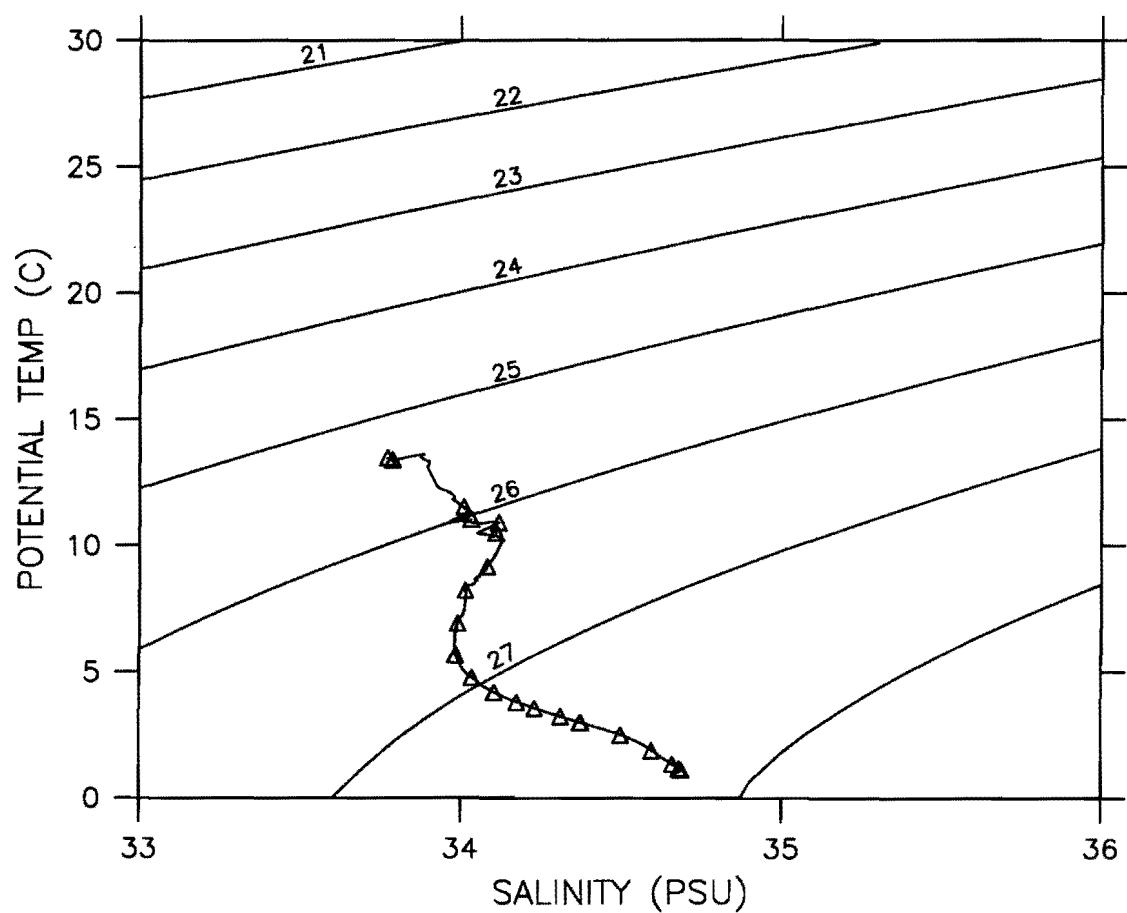
CAST CG2-91-DI -058 DATE 21 MAR 91 TIME 1129 GMT
LAT 37 09.9N LONG 151 57.6W



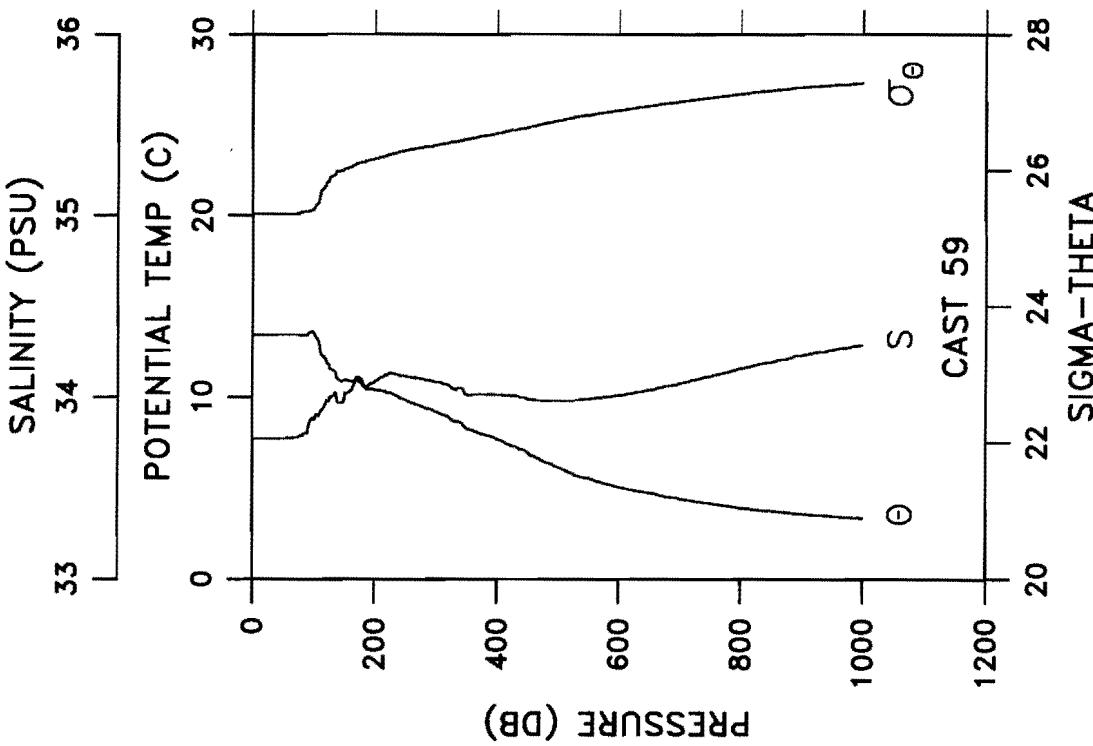
CAST CG2-91-DI -058 DATE 21 MAR 91 TIME 1129 GMT
 LAT 37 09.9N LONG 151 57.6W WEATHER 1 SEA STATE 1
 BAROMETER 31 WIND DIR 000 T SPD 04 KT VISIBILITY 8
 CLOUD 0 AMOUNT 6 DRY 12.5 WET 09.9 DEPTH 5511 M



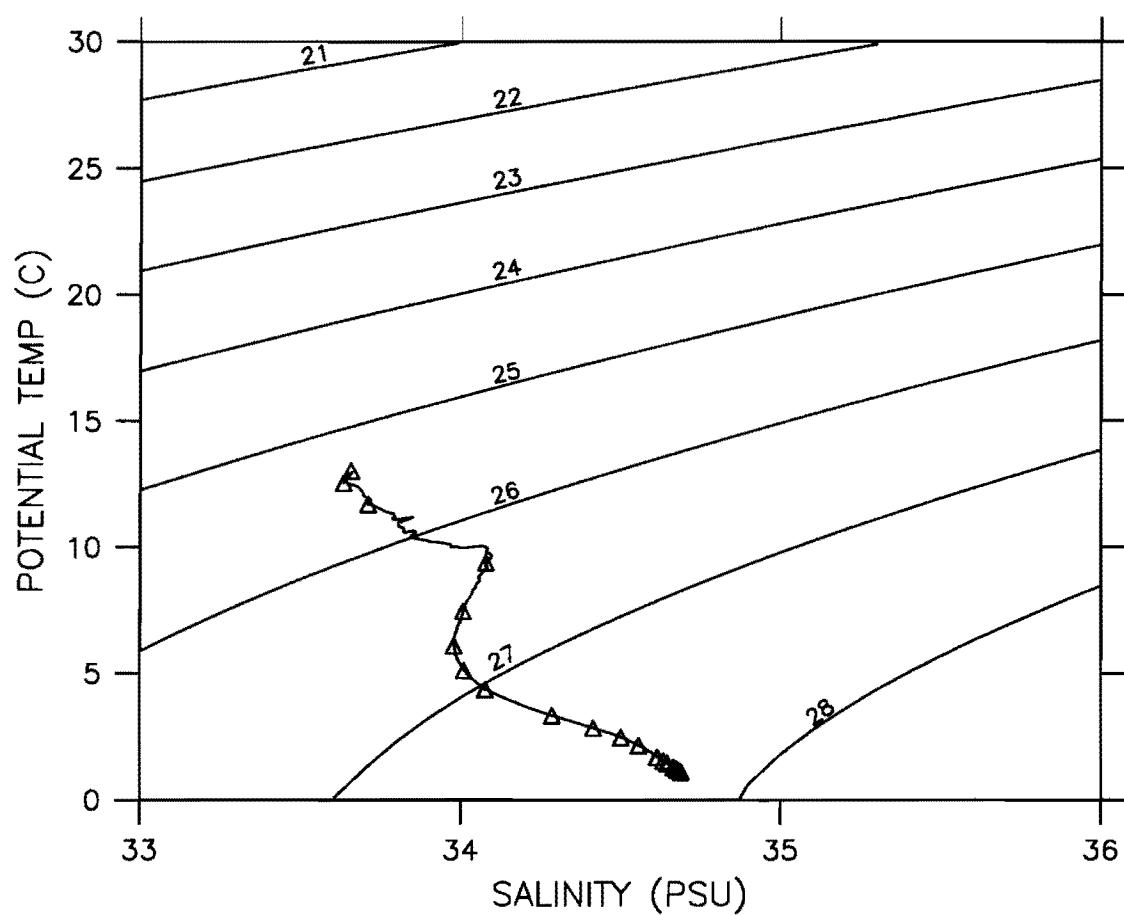
CAST CG2-91-DI -059 DATE 21 MAR 91 TIME 1904 GMT
LAT 37 59.9N LONG 152 00.0W



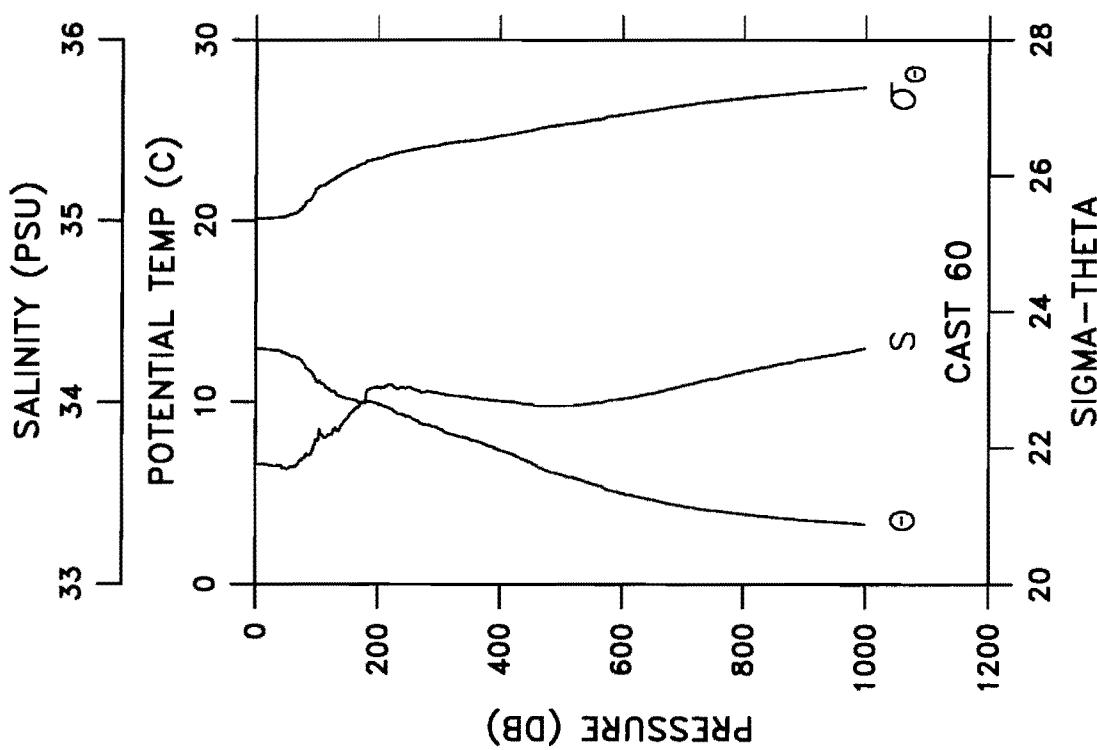
CAST CG2-91-DI -059 DATE 21 MAR 91 TIME 1904 GMT
 LAT 37 59.9N LONG 152 00.0W WEATHER 2 SEA STATE 1
 BAROMETER 32 WIND DIR 130 T SPD 08 KT VISIBILITY 8
 CLOUD 6 AMOUNT 8 DRY 13.2 WET 10.9 DEPTH 4973 M



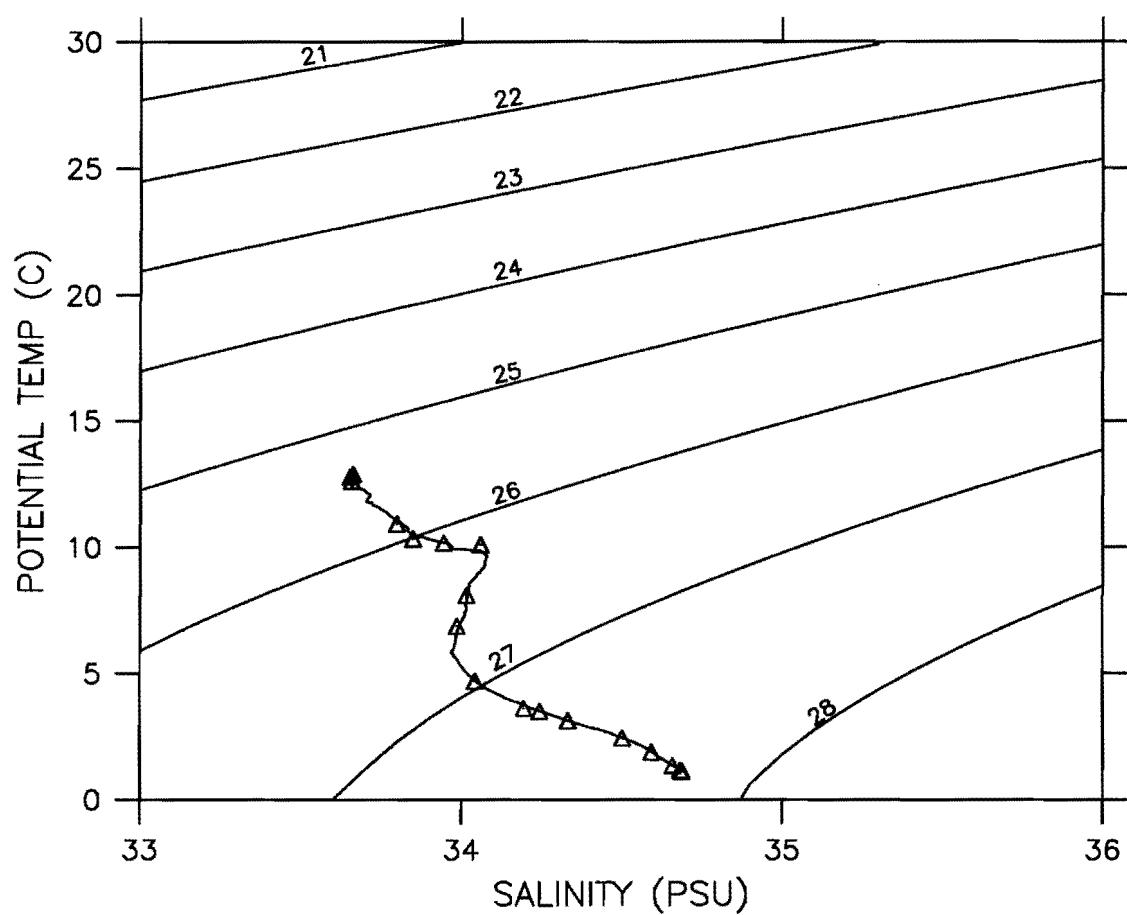
CAST CG2-91-DI -060 DATE 22 MAR 91 TIME 0215 GMT
LAT 38 40.2N LONG 151 59.9W



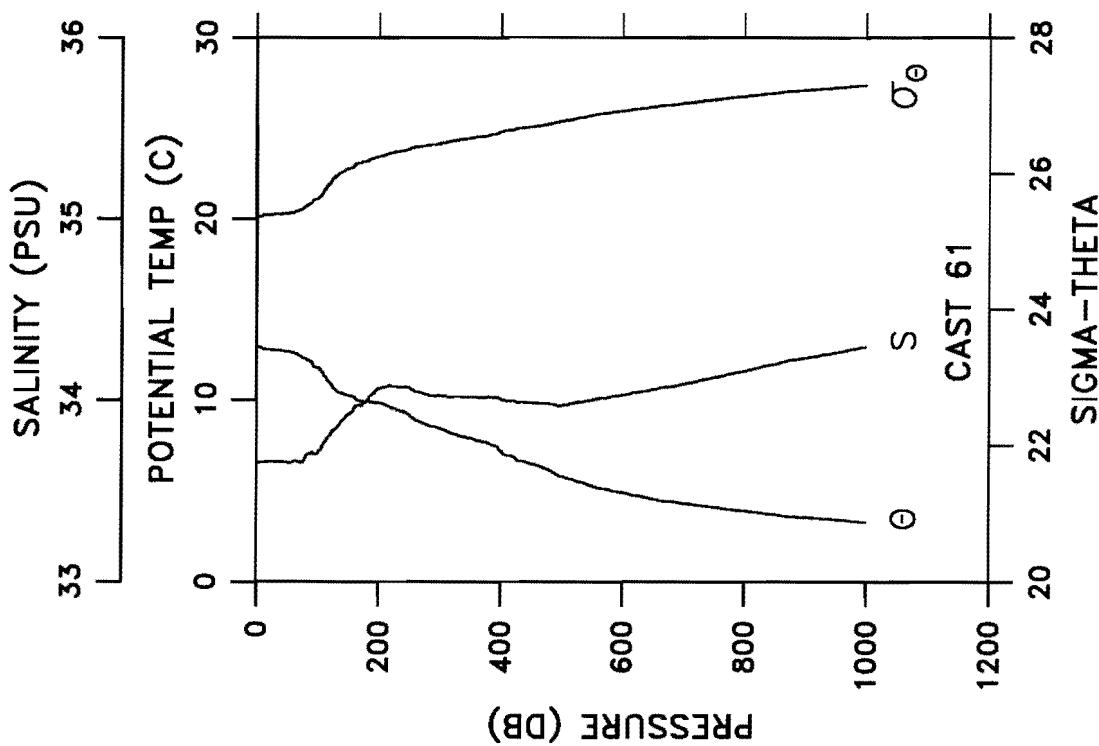
CAST CG2-91-DI-060 DATE 22 MAR 91 TIME 0215 GMT
 LAT 38 40.2N LONG 151 59.9W WEATHER 2 SEA STATE 1
 BAROMETER 31 WIND DIR 120 T SPD 01 KT VISIBILITY 7
 CLOUD 6 AMOUNT 8 DRY 15.0 WET 12.4 DEPTH 5338 M



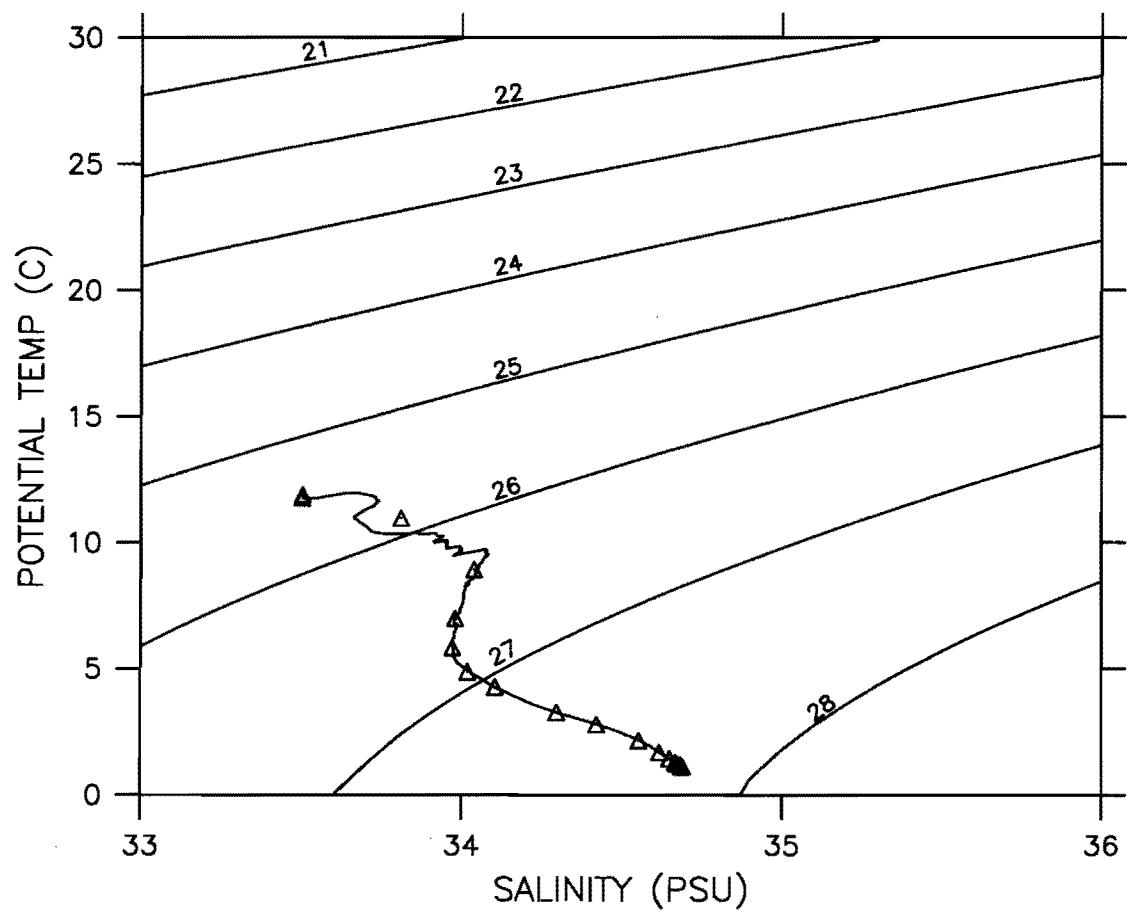
CAST CG2-91-DI -061 DATE 22 MAR 91 TIME 0933 GMT
LAT 39 21.0N LONG 151 59.2W



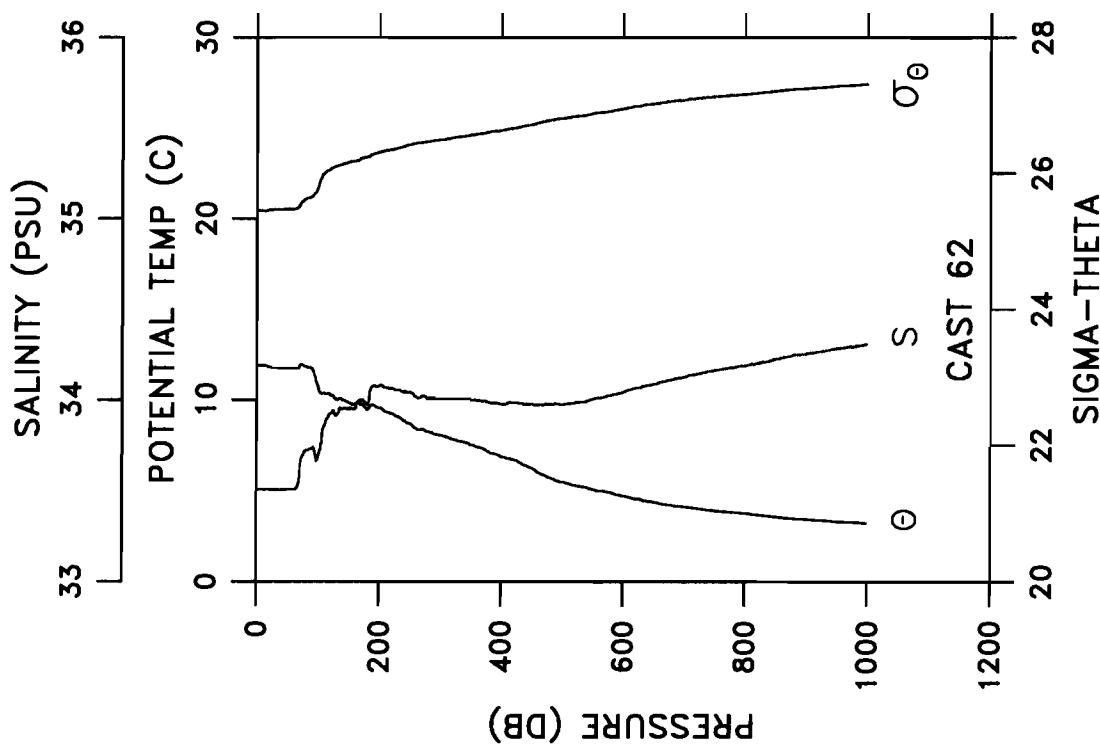
CAST CG2-91-DI -061	DATE 22 MAR 91	TIME 0933 GMT
LAT 39 21.0N	LONG 151 59.2W	WEATHER 1 SEA STATE 0
BAROMETER 33	WIND DIR 000 T	SPD 00 KT
CLOUD 0 AMOUNT 3	DRY 12.3	WET 11.2 DEPTH 5346 M
PRES (DB)	POT TEMP (C)	SAL (PSU)
0	12.930	33.658
10	12.873	33.660
20	12.799	33.662
30	12.767	33.662
40	12.748	33.661
50	12.697	33.659
60	12.657	33.663
70	12.477	33.659
80	12.308	33.687
90	12.125	33.710
100	11.778	33.707
110	11.389	33.764
120	10.980	33.802
130	10.519	33.844
140	10.369	33.885
150	10.249	33.917
160	10.145	33.959
170	9.937	33.970
180	9.912	33.992
190	9.863	34.032
200	9.833	34.062
250	9.169	34.067
300	8.453	34.024
350	7.913	34.017
400	7.192	34.004
450	6.512	33.983
500	5.801	33.969
550	5.289	33.999
600	4.910	34.025
650	4.564	34.056
700	4.316	34.088
750	4.104	34.124
800	3.914	34.159
900	3.553	34.232
1000	3.287	34.294
1500	2.459	34.501
2000	1.888	34.596
2500	1.546	34.636
3000	1.352	34.660
3500	1.229	34.675
4000	1.169	34.682
4500	1.140	34.686
5000	1.131	34.686
5510	1.114	34.687



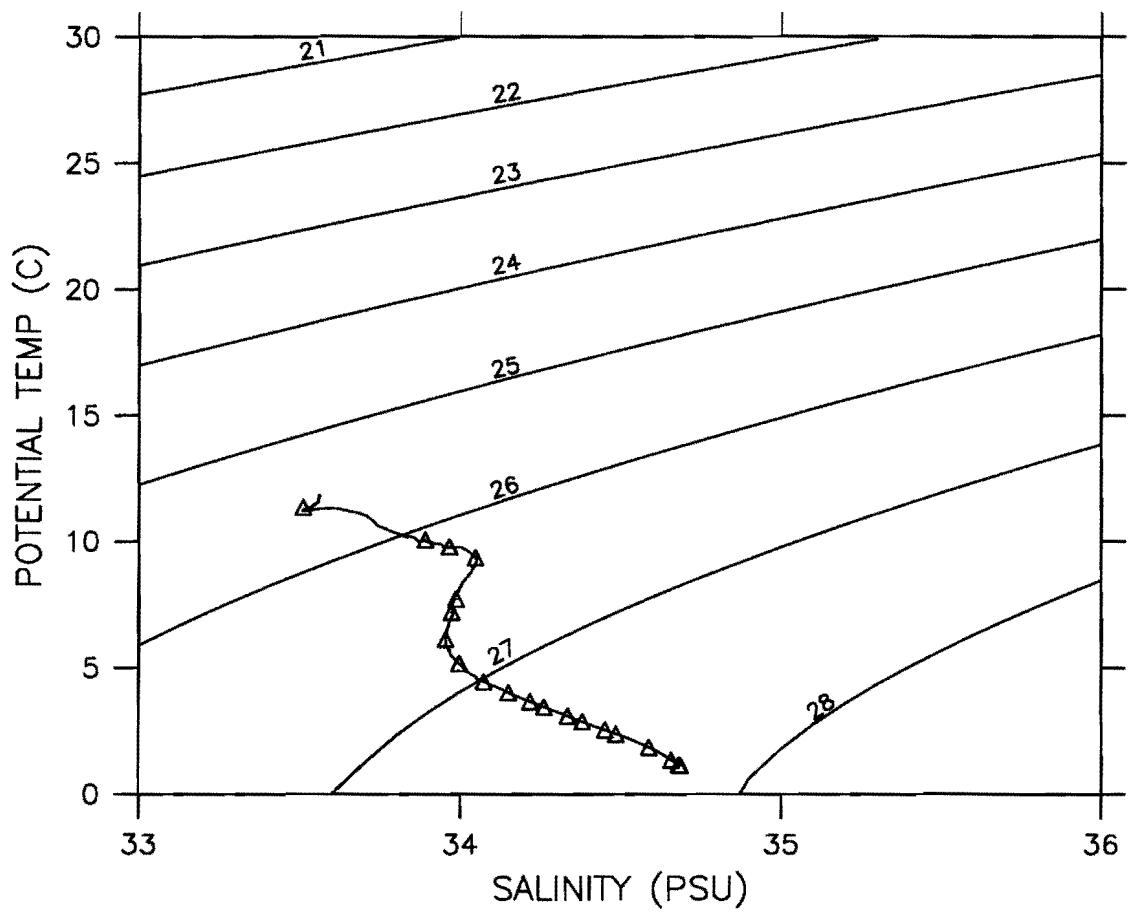
CAST CG2-91-DI -062 DATE 22 MAR 91 TIME 1709 GMT
LAT 40 00.9N LONG 151 59.6W

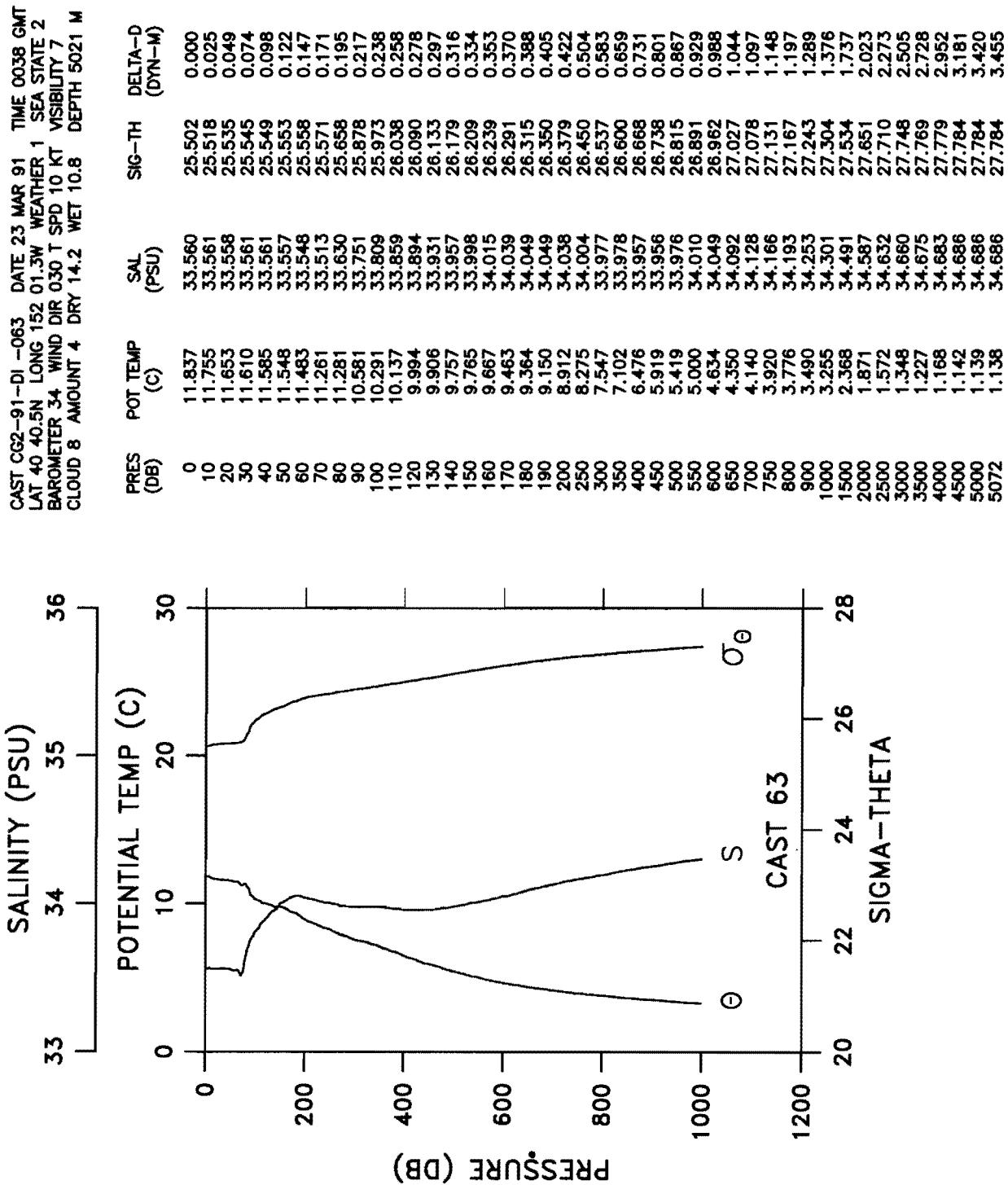


CAST CG2-91-DI -062 DATE 22 MAR 91 TIME 1709 GMT
 LAT 40 00.9N LONG 151 59.6W WEATHER 1 SEA STATE 3
 BAROMETER 34 WIND DIR 035 T SPD 17 KT VISIBILITY 7
 CLOUD 6 AMOUNT 6 DRY 10.0 WET 08.9 DEPTH 5253 M

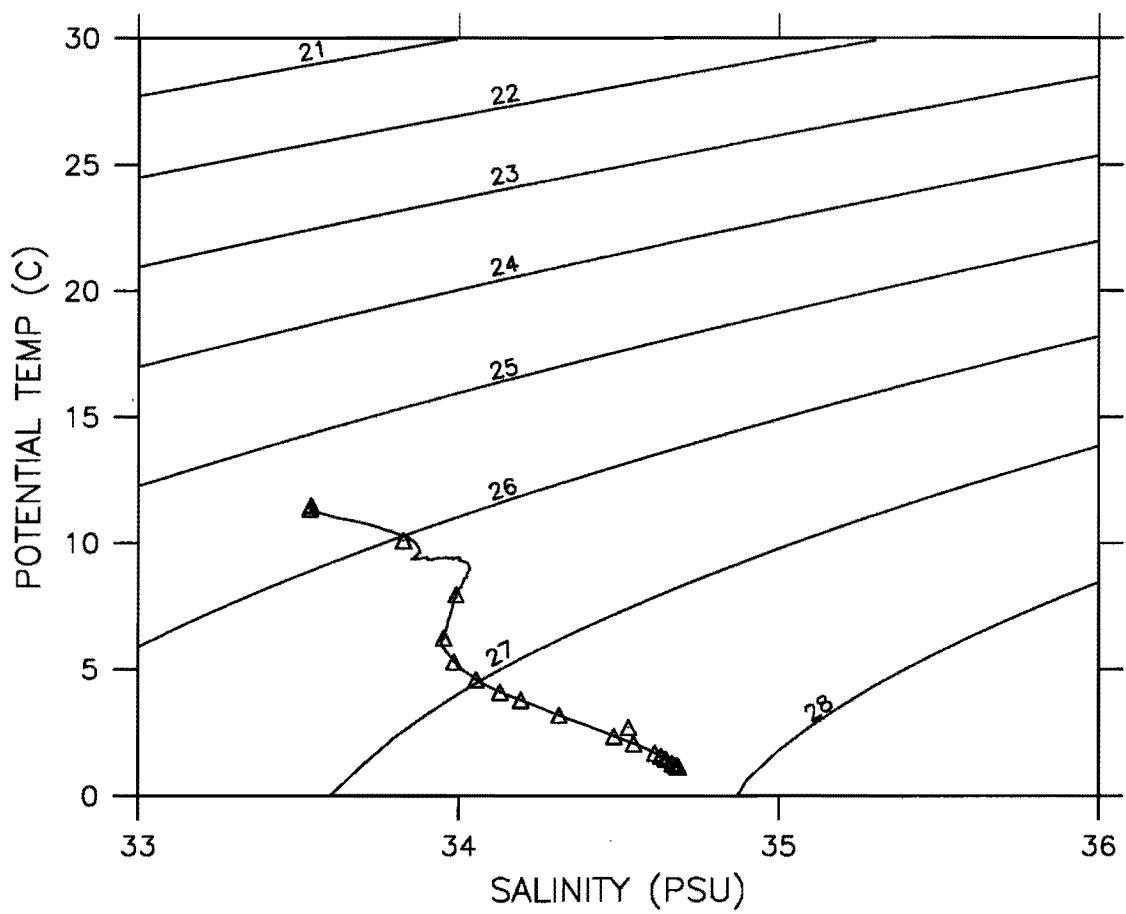


CAST CG2-91-DI -063 DATE 23 MAR 91 TIME 0038 GMT
LAT 40 40.5N LONG 152 01.3W

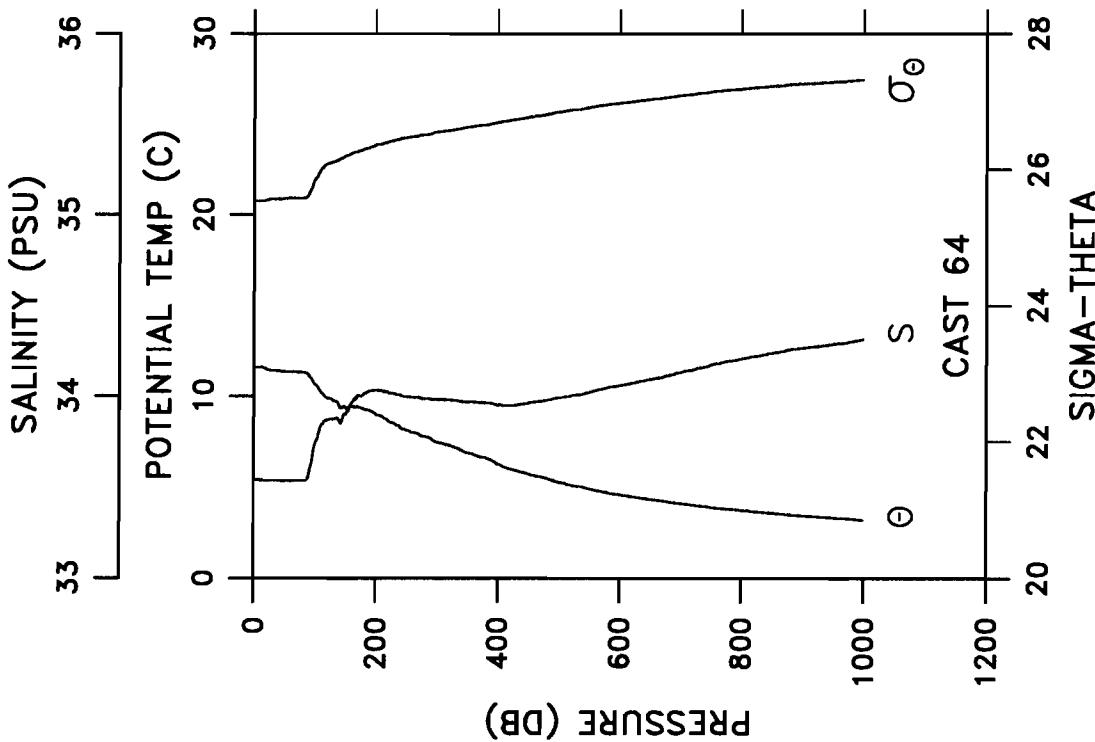




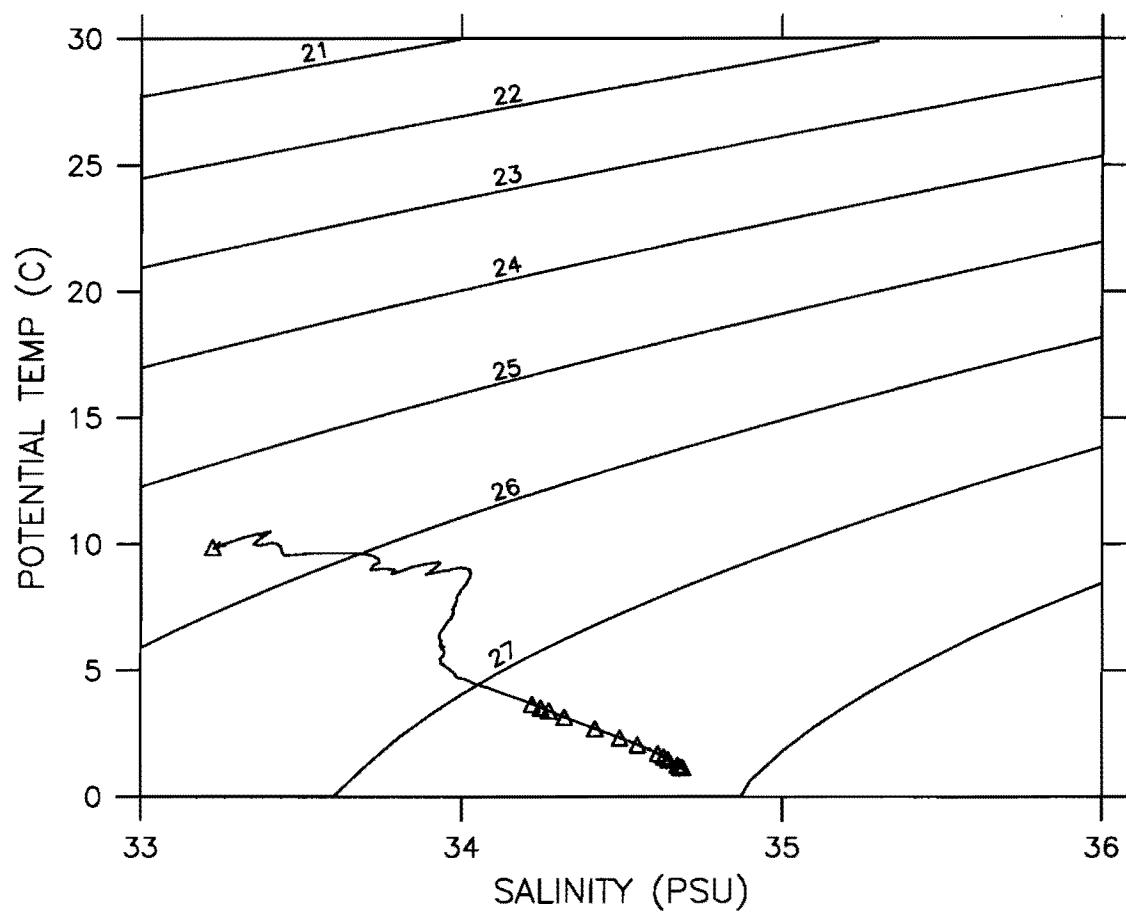
CAST CG2-91-DI -064 DATE 23 MAR 91 TIME 0801 GMT
LAT 41 21.0N LONG 152 00.3W



		DATE 23 MAR 91		TIME 0801 GMT	
		LAT 41 21.0N LONG 152 00.3W		WEATHER 0 SEA STATE 3	
		BAROMETER 36		WIND DIR 015 T SPD 15 KT VISIBILITY 8	
		CLOUD AMOUNT 1 DRY 09.9 WET 08.2		DEPTH 5218 M	
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	11.587	33.541	25.534	0.000	
10	11.596	33.540	25.532	0.024	
20	11.515	33.539	25.545	0.049	
30	11.411	33.537	25.563	0.073	
40	11.397	33.537	25.565	0.097	
50	11.363	33.536	25.571	0.121	
60	11.336	33.536	25.576	0.146	
70	11.328	33.538	25.578	0.170	
80	11.316	33.538	25.580	0.194	
90	11.174	33.570	25.631	0.218	
100	10.697	33.731	25.841	0.241	
110	10.259	33.835	25.998	0.262	
120	9.906	33.868	26.084	0.281	
130	9.784	33.874	26.109	0.301	
140	9.495	33.866	26.151	0.320	
150	9.381	33.901	26.197	0.338	
160	9.426	33.959	26.235	0.357	
170	9.432	34.000	26.266	0.375	
180	9.293	34.010	26.297	0.392	
190	9.214	34.028	26.323	0.410	
200	9.003	34.034	26.361	0.427	
250	8.139	33.998	26.466	0.509	
300	7.479	33.980	26.548	0.587	
350	6.881	33.966	26.621	0.662	
400	6.250	33.948	26.690	0.734	
450	5.724	33.959	26.765	0.802	
500	5.262	33.990	26.844	0.867	
550	4.911	34.020	26.909	0.929	
600	4.589	34.057	26.974	0.987	
650	4.342	34.091	27.027	1.042	
700	4.107	34.131	27.084	1.095	
750	3.898	34.171	27.137	1.146	
800	3.733	34.204	27.180	1.194	
900	3.435	34.264	27.257	1.285	
1000	3.183	34.316	27.322	1.370	
1500	2.372	34.484	27.528	1.728	
2000	1.840	34.591	27.656	2.014	
2500	1.548	34.636	27.714	2.262	
3000	1.342	34.661	27.749	2.493	
3500	1.228	34.675	27.769	2.716	
4000	1.168	34.682	27.779	2.940	
4500	1.143	34.685	27.783	3.169	
5000	1.137	34.687	27.784	3.408	
5280	1.135	34.686	27.784	3.547	

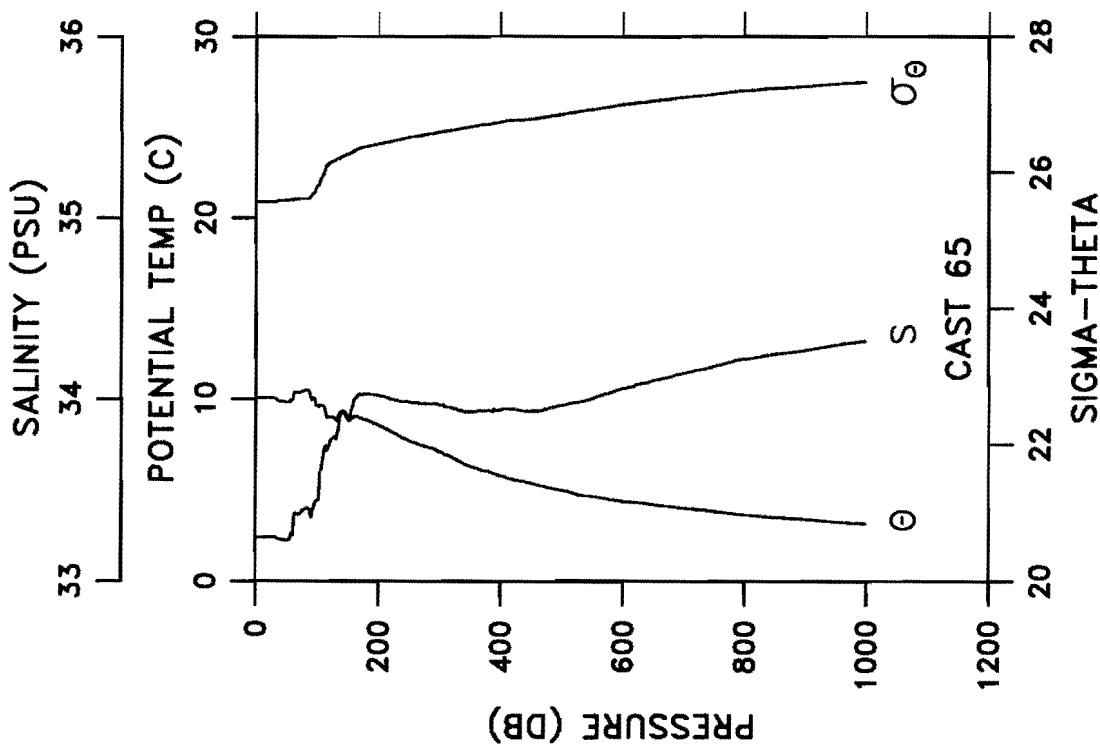


CAST CG2-91-DI -065 DATE 23 MAR 91 TIME 1556 GMT
LAT 41 59.9N LONG 151 59.2W

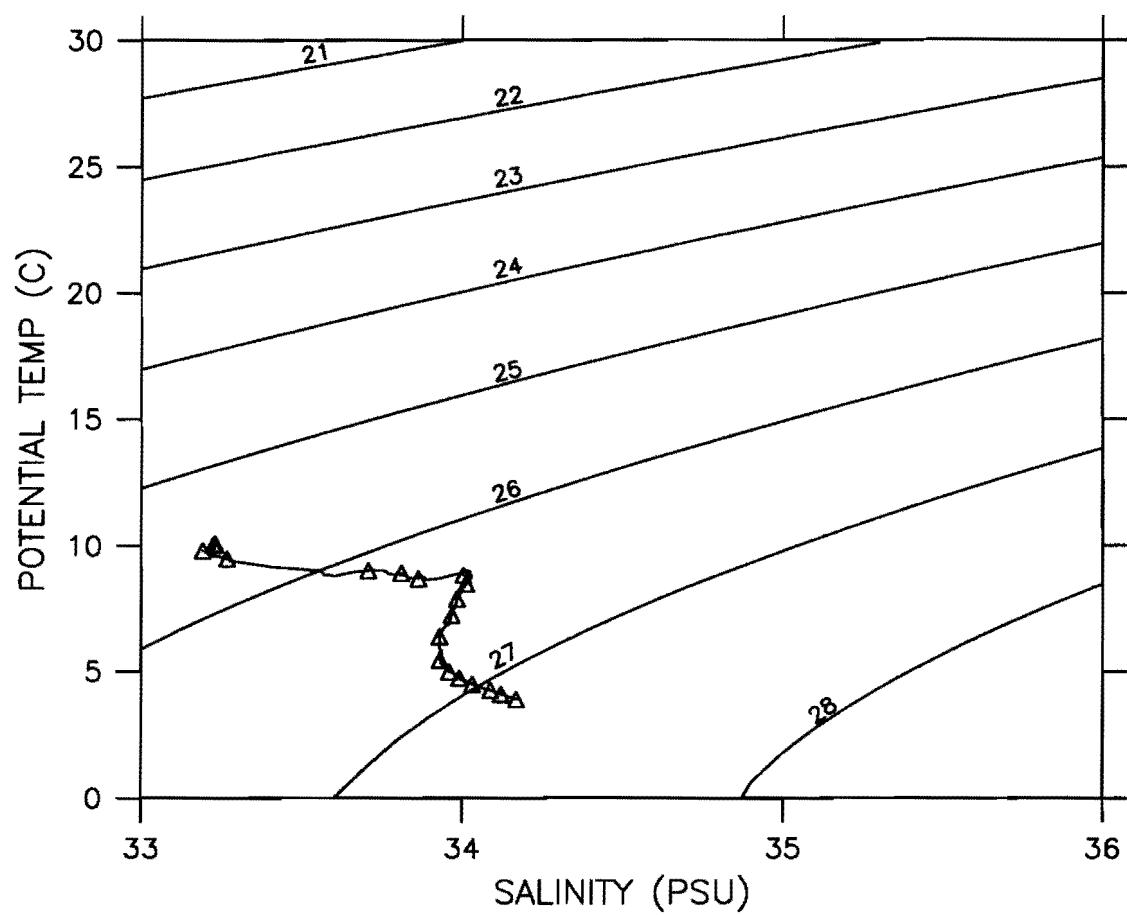


CAST CG2-91-DI -065 DATE 23 MAR 91 TIME 1556 GMT
 LAT 41 59.9N LONG 151 59.2W WEATHER 2 SEA STATE 3
 BAROMETER 35 WIND DIR 060 T SPD 16 KT VISIBILITY 7
 CLOUD 6 AMOUNT 8 DRY 08.7 WET 07.5 DEPTH 5117 M

PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	10.063	33.243	25.570	0.000
10	10.064	33.242	25.569	0.024
20	10.072	33.244	25.569	0.048
30	10.060	33.246	25.573	0.072
40	9.898	33.231	25.589	0.096
50	9.844	33.226	25.593	0.120
60	9.947	33.261	25.604	0.144
70	10.381	33.368	25.613	0.168
80	10.467	33.393	25.618	0.192
90	10.112	33.361	25.654	0.215
100	9.604	33.445	25.804	0.238
110	9.628	33.674	25.979	0.260
120	9.013	33.747	26.135	0.279
130	8.899	33.786	26.184	0.298
140	9.277	33.926	26.235	0.316
150	8.917	33.903	26.273	0.334
160	9.044	33.993	26.323	0.351
170	8.946	34.025	26.384	0.368
180	8.854	34.028	26.380	0.385
190	8.720	34.026	26.400	0.402
200	8.565	34.020	26.419	0.418
250	7.707	33.983	26.518	0.498
300	7.110	33.968	26.591	0.574
350	6.513	33.950	26.667	0.646
400	5.814	33.941	26.739	0.715
450	5.391	33.934	26.785	0.781
500	5.003	33.964	26.854	0.845
550	4.664	34.002	26.922	0.906
600	4.386	34.059	26.998	0.963
650	4.209	34.103	27.051	1.017
700	4.011	34.145	27.105	1.069
750	3.842	34.183	27.152	1.119
800	3.651	34.223	27.203	1.166
900	3.405	34.269	27.264	1.256
1000	3.160	34.320	27.328	1.340
1500	2.373	34.485	27.529	1.698
2000	1.870	34.587	27.651	1.985
2500	1.560	34.632	27.711	2.236
3000	1.343	34.660	27.749	2.467
3500	1.230	34.675	27.769	2.691
4000	1.170	34.683	27.779	2.914
4500	1.143	34.686	27.783	3.144
5000	1.139	34.687	27.784	3.383
5159	1.138	34.687	27.784	3.451

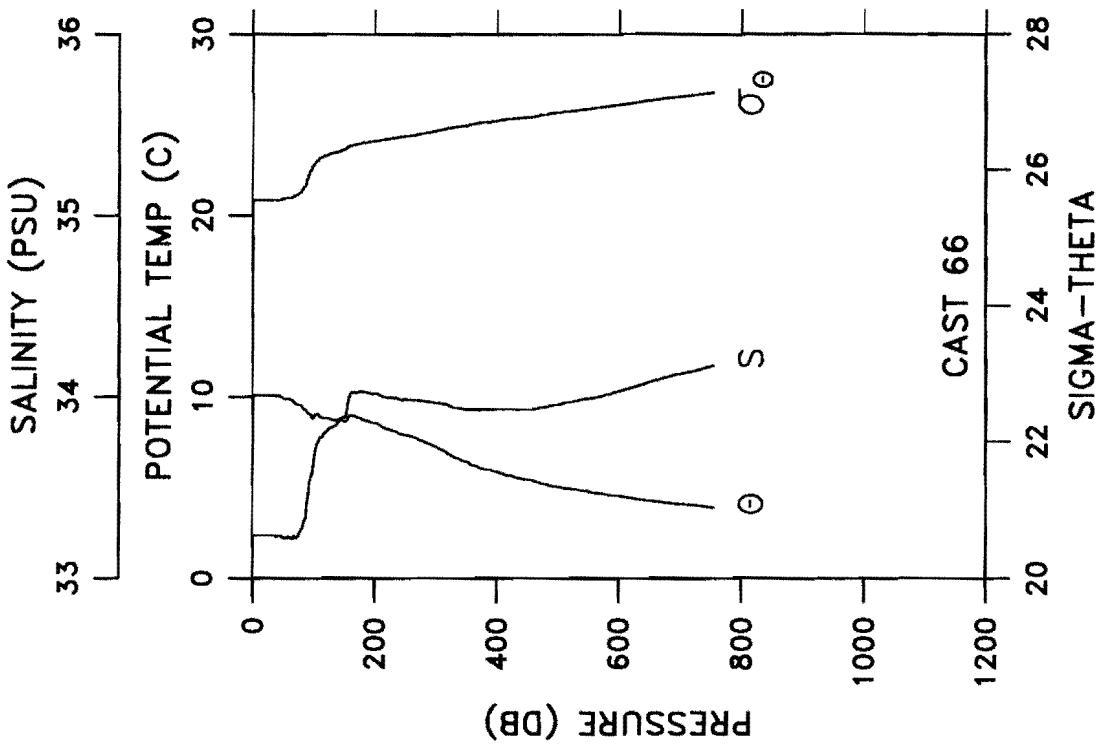


CAST CG2-91-DI -066 DATE 24 MAR 91 TIME 0931 GMT
LAT 41 59.6N LONG 151 59.1W

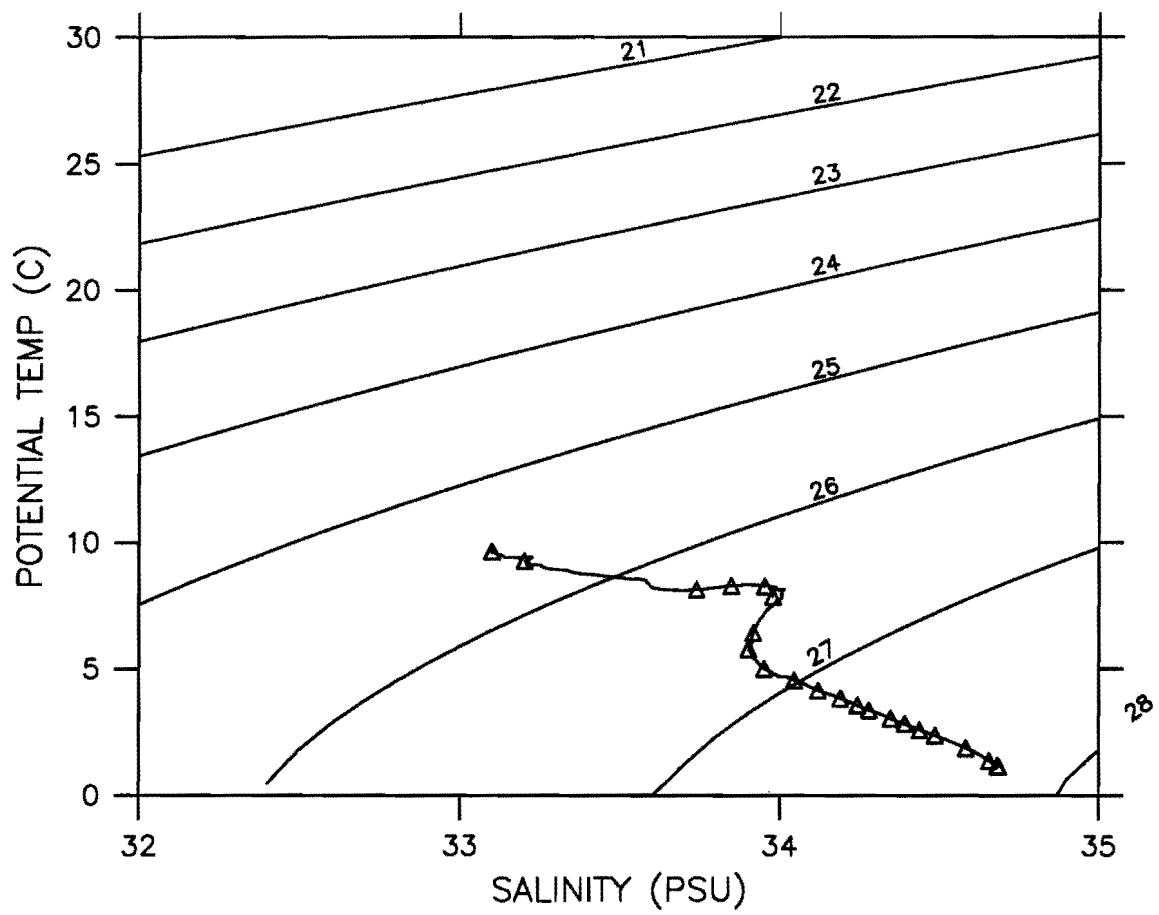


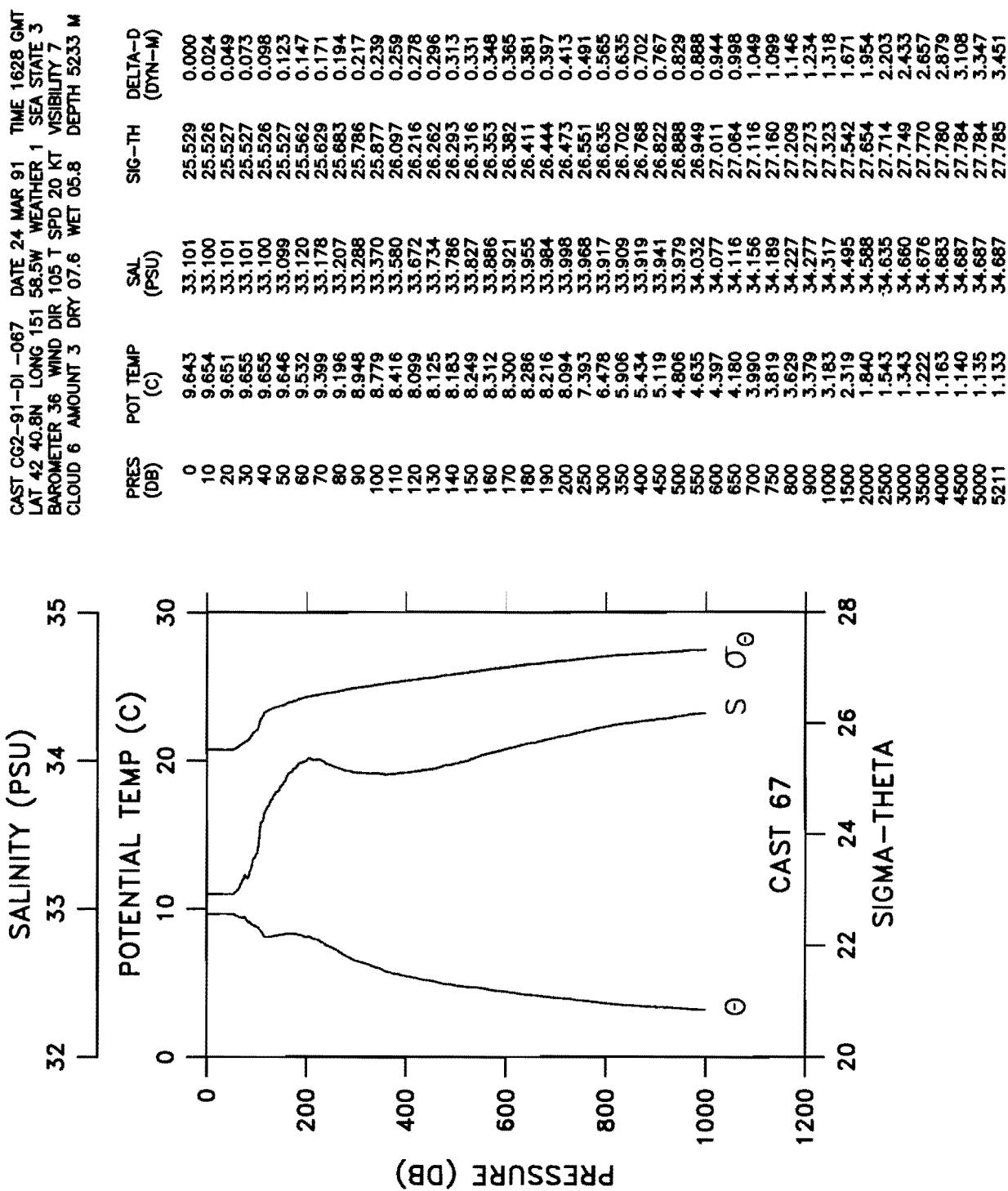
CAST CG2-91-DI -066 DATE 24 MAR 91 TIME 0931 GMT
 LAT 41 59.6N LONG 151 59.1W WEATHER 1 SEA STATE 4
 BAROMETER 36 WIND DIR 105 T SPD 18 KT VISIBILITY 8
 CLOUD 0 AMOUNT 3 DRY 08.3 WET 06.2 DEPTH 5139 M

PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	10.068	33.241	25.567	0.000
10	10.073	33.238	25.564	0.024
20	10.076	33.238	25.564	0.048
30	10.074	33.238	25.565	0.072
40	10.074	33.238	25.564	0.097
50	9.901	33.228	25.585	0.121
60	9.861	33.225	25.590	0.145
70	9.639	33.223	25.624	0.169
80	9.490	33.270	25.686	0.192
90	9.122	33.435	25.874	0.215
100	8.871	33.635	26.070	0.235
110	8.893	33.769	26.172	0.254
120	8.835	33.805	26.209	0.272
130	8.714	33.851	26.248	0.290
140	8.718	33.859	26.269	0.308
150	8.645	33.887	26.302	0.326
160	8.976	34.016	26.352	0.343
170	8.868	34.023	26.374	0.360
180	8.710	34.026	26.401	0.376
190	8.641	34.024	26.410	0.393
200	8.551	34.018	26.420	0.409
250	7.877	33.985	26.495	0.489
300	7.243	33.967	26.571	0.566
350	6.415	33.929	26.653	0.639
400	5.861	33.933	26.727	0.709
450	5.448	33.933	26.777	0.775
500	5.042	33.958	26.844	0.840
550	4.784	33.990	26.899	0.901
600	4.536	34.032	26.960	0.960
650	4.292	34.081	27.025	1.016
700	4.091	34.127	27.082	1.069
750	3.908	34.168	27.134	1.119
754	3.894	34.170	27.137	1.123

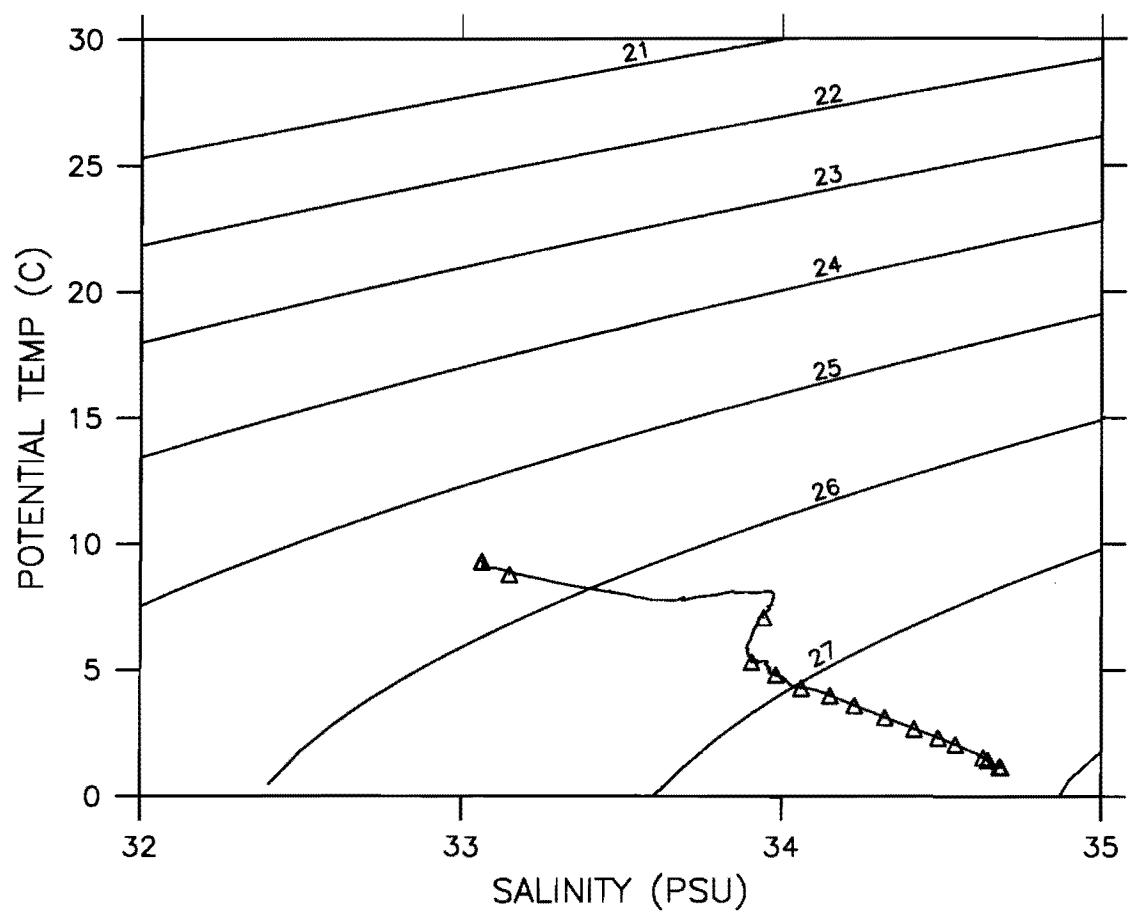


CAST CG2-91-DI -067 DATE 24 MAR 91 TIME 1628 GMT
LAT 42 40.8N LONG 151 58.5W

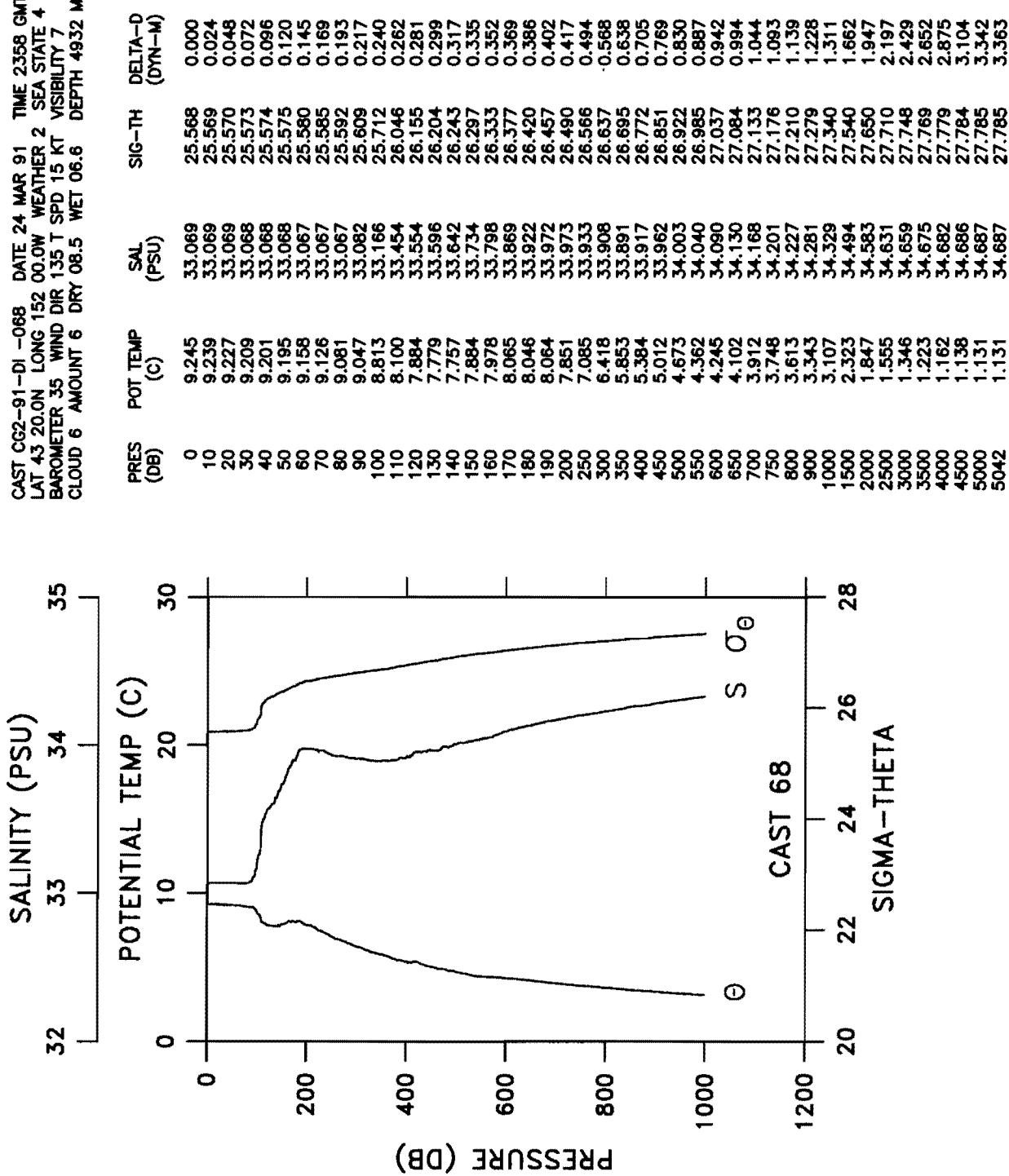




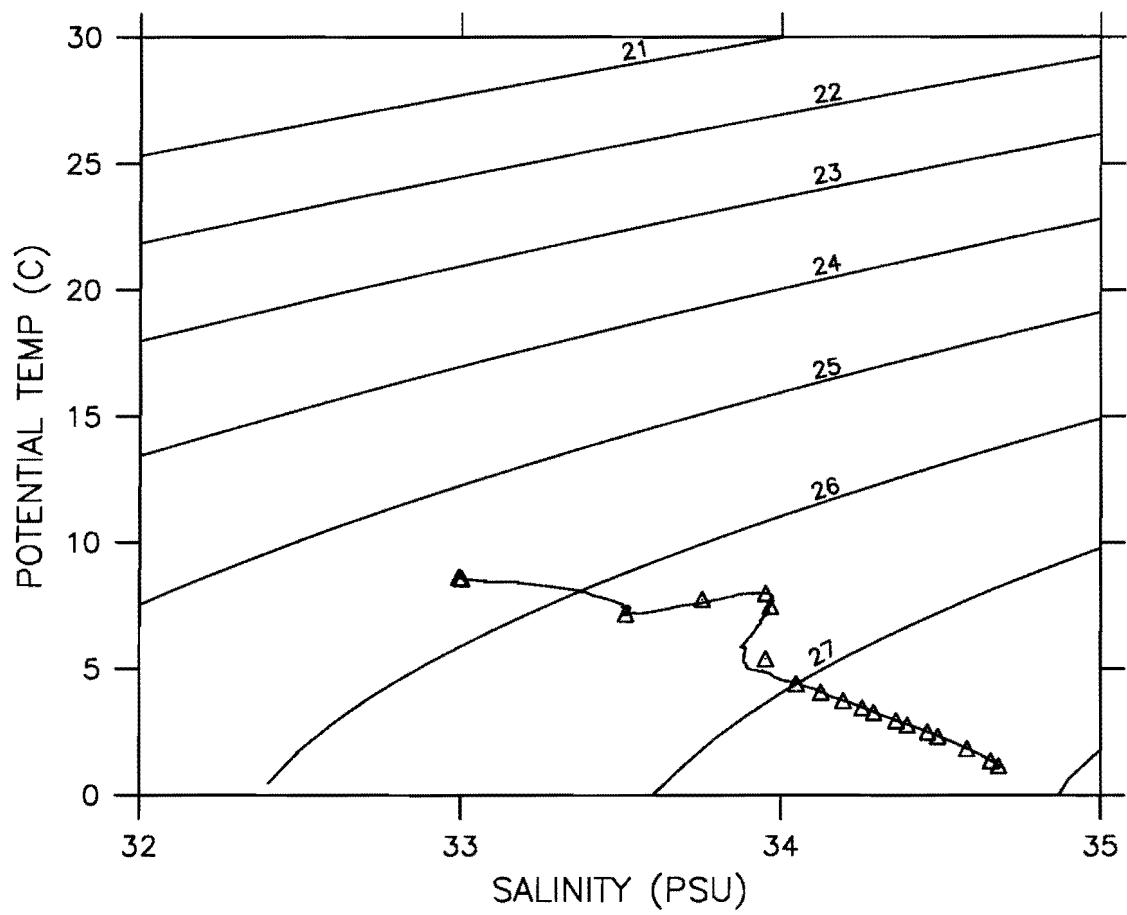
CAST CG2-91-DI -068 DATE 24 MAR 91 TIME 2358 GMT
LAT 43 20.0N LONG 152 00.0W

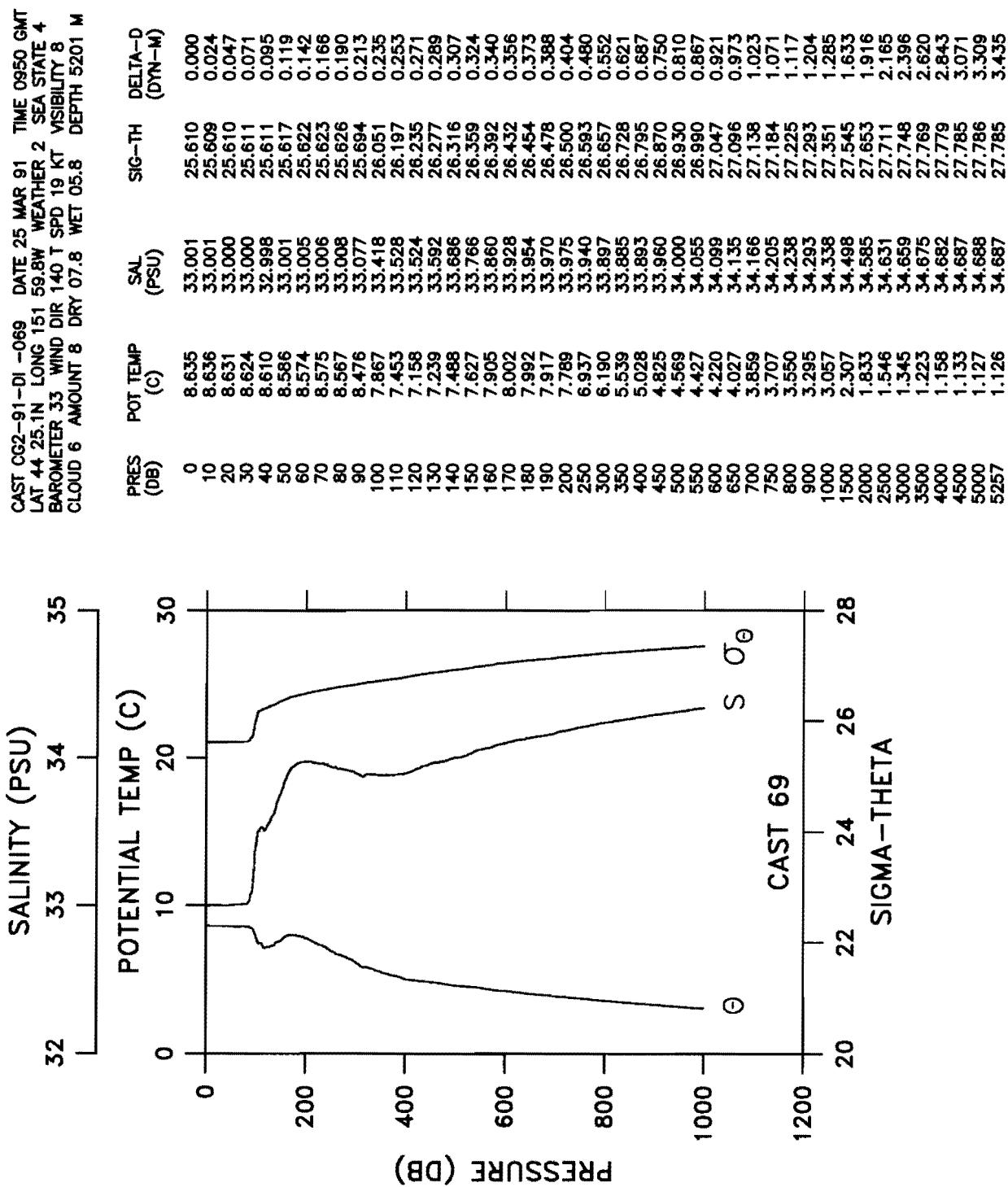


CAST CG2-91-DI -068 DATE 24 MAR 91 TIME 2358 GMT
 LAT 43 20.0N LONG 152 00.0W WEATHER 2 SEA STATE 4
 BAROMETER 35 WIND DIR 135 T SPD 15 KT VISIBILITY 7
 CLOUD 6 AMOUNT 6 DRY 08.5 WET 06.6 DEPTH 4932 M

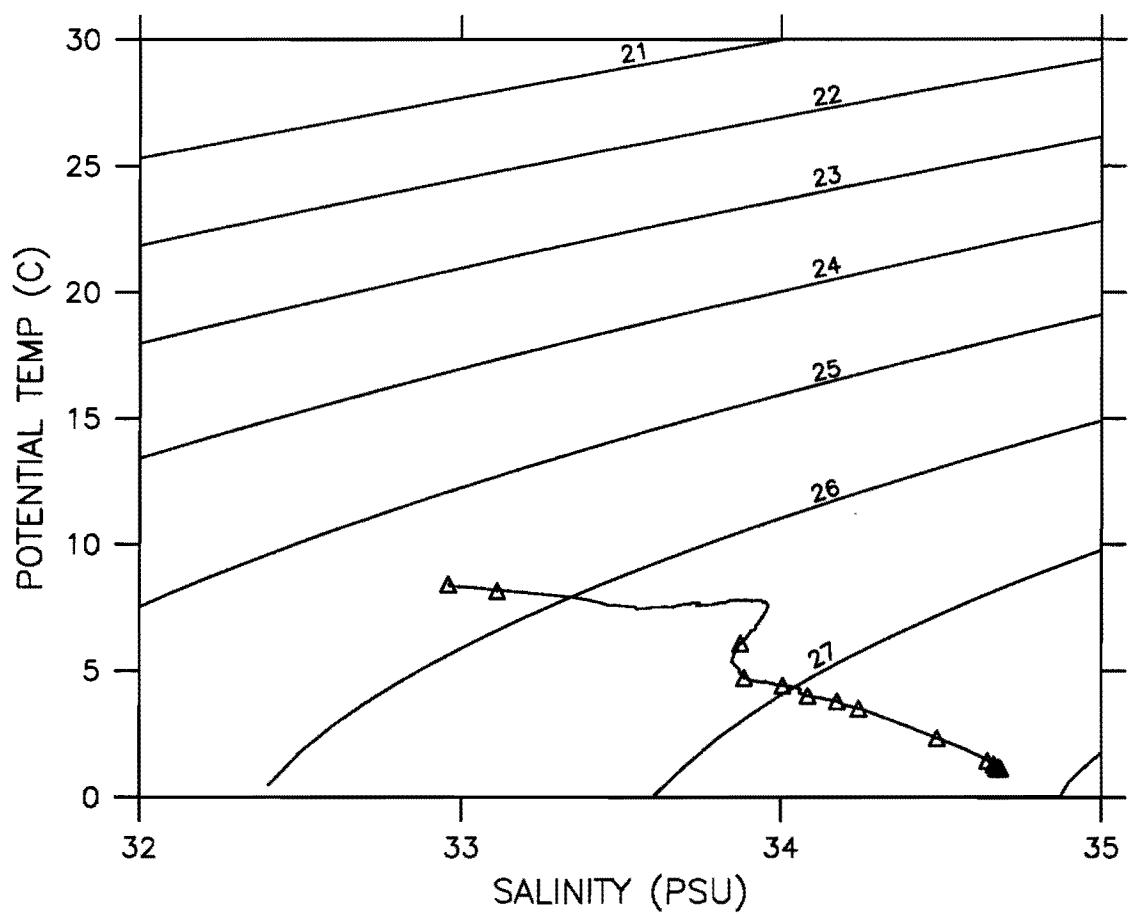


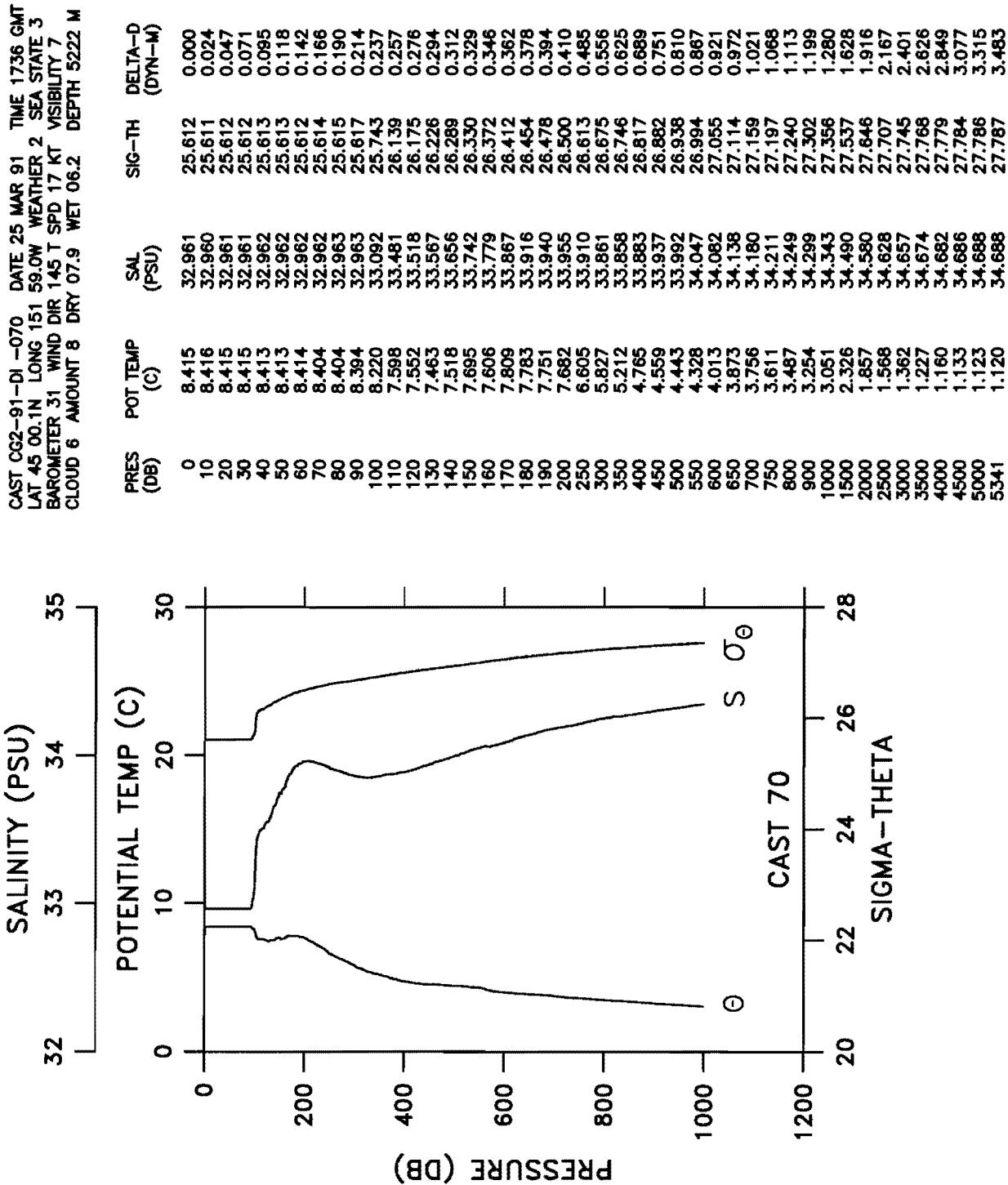
CAST CG2-91-DI -069 DATE 25 MAR 91 TIME 0950 GMT
LAT 44 25.1N LONG 151 59.8W



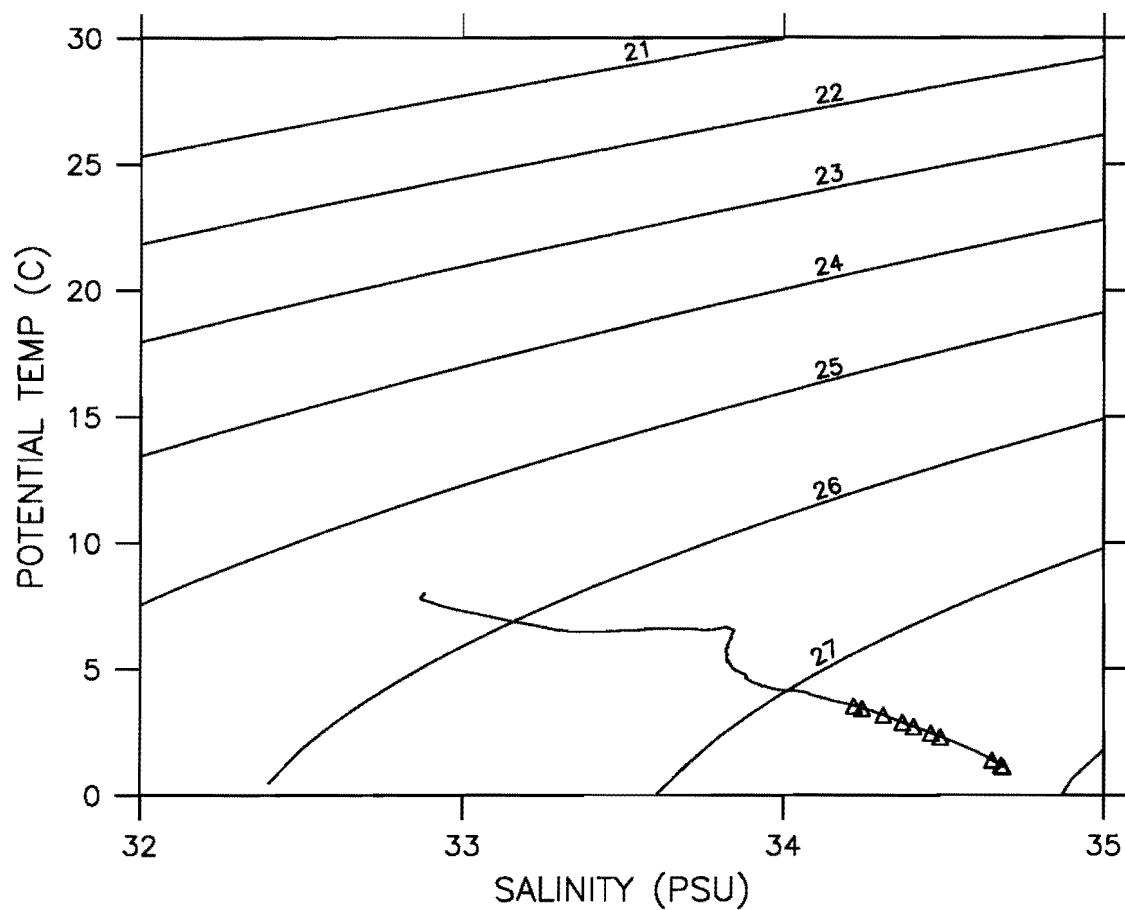


CAST CG2-91-DI -070 DATE 25 MAR 91 TIME 1736 GMT
LAT 45 00.1N LONG 151 59.0W

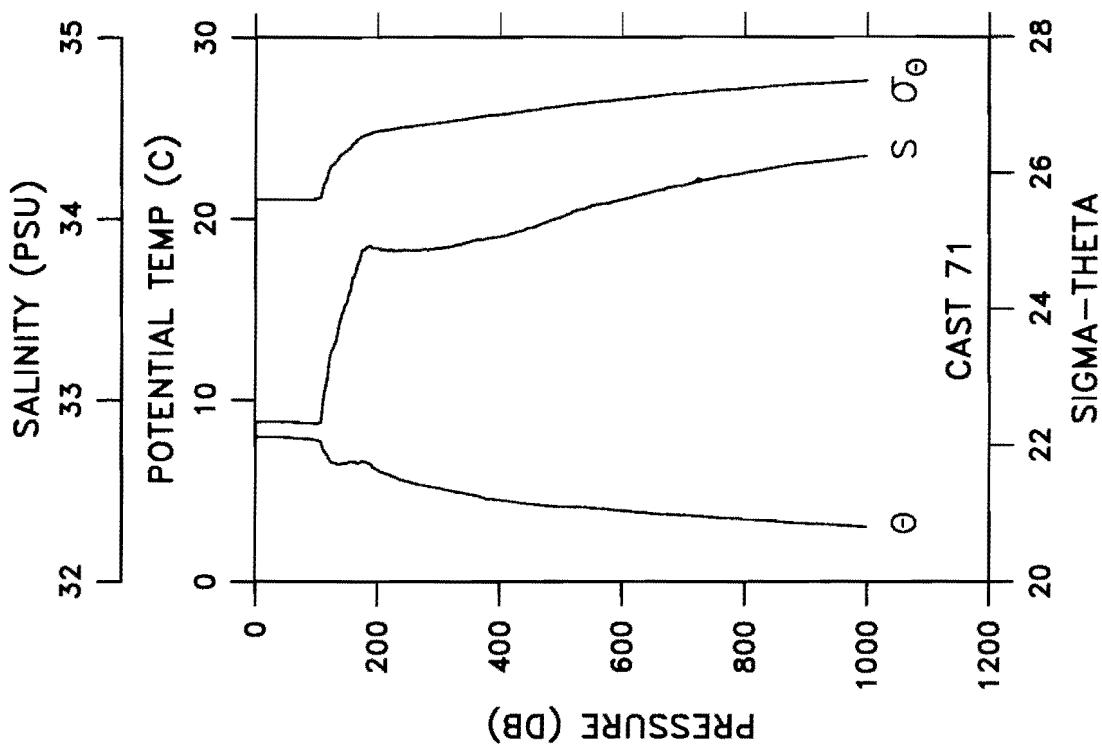




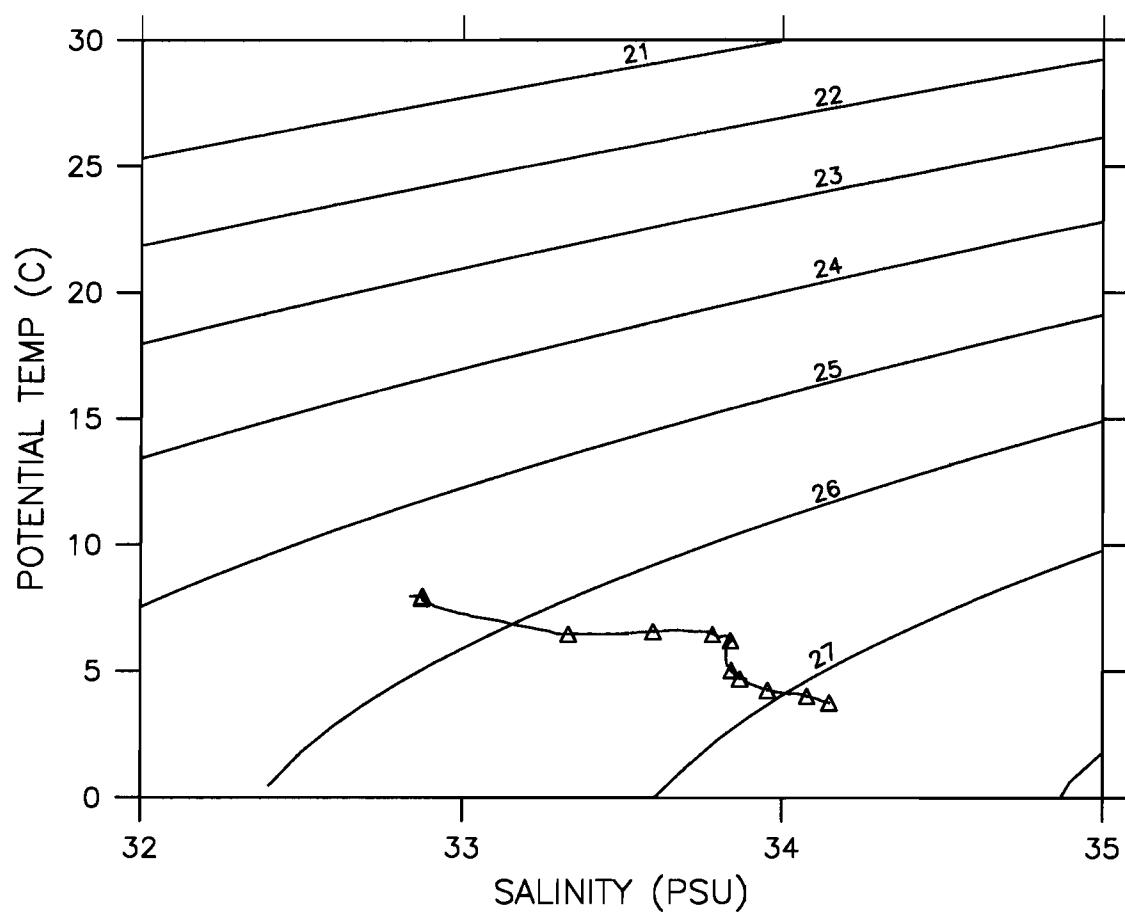
CAST CG2-91-DI -071 DATE 26 MAR 91 TIME 0113 GMT
LAT 45 41.0N LONG 151 59.7W



CAST CG2-91-DI -071 DATE 26 MAR 91 TIME 0113 GMT
 LAT 45 41.0N LONG 151 59.7W WEATHER 2 SEA STATE 3
 BAROMETER 28 WIND DIR 140 T SPD 18 KT VISIBILITY 7
 CLOUD 6 AMOUNT 8 DRY 08.1 WET 06.8 DEPTH 5271 M

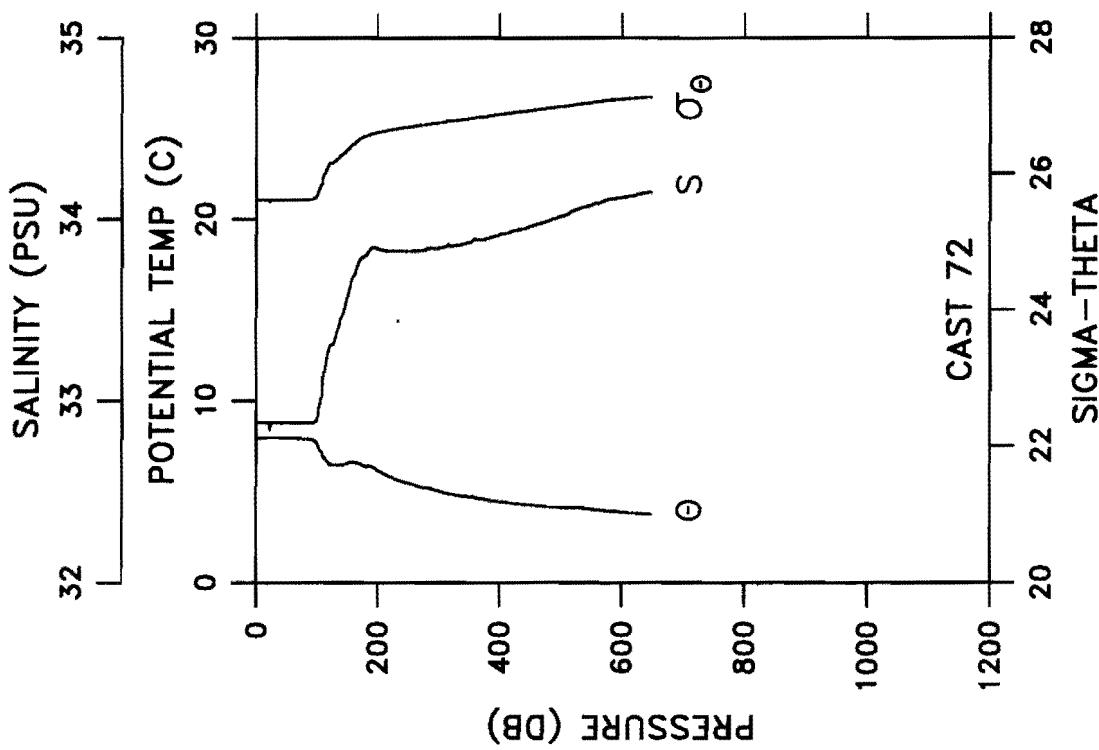


CAST CG2-91-DI -072 DATE 26 MAR 91 TIME 0405 GMT
LAT 45 41.1N LONG 151 59.6W

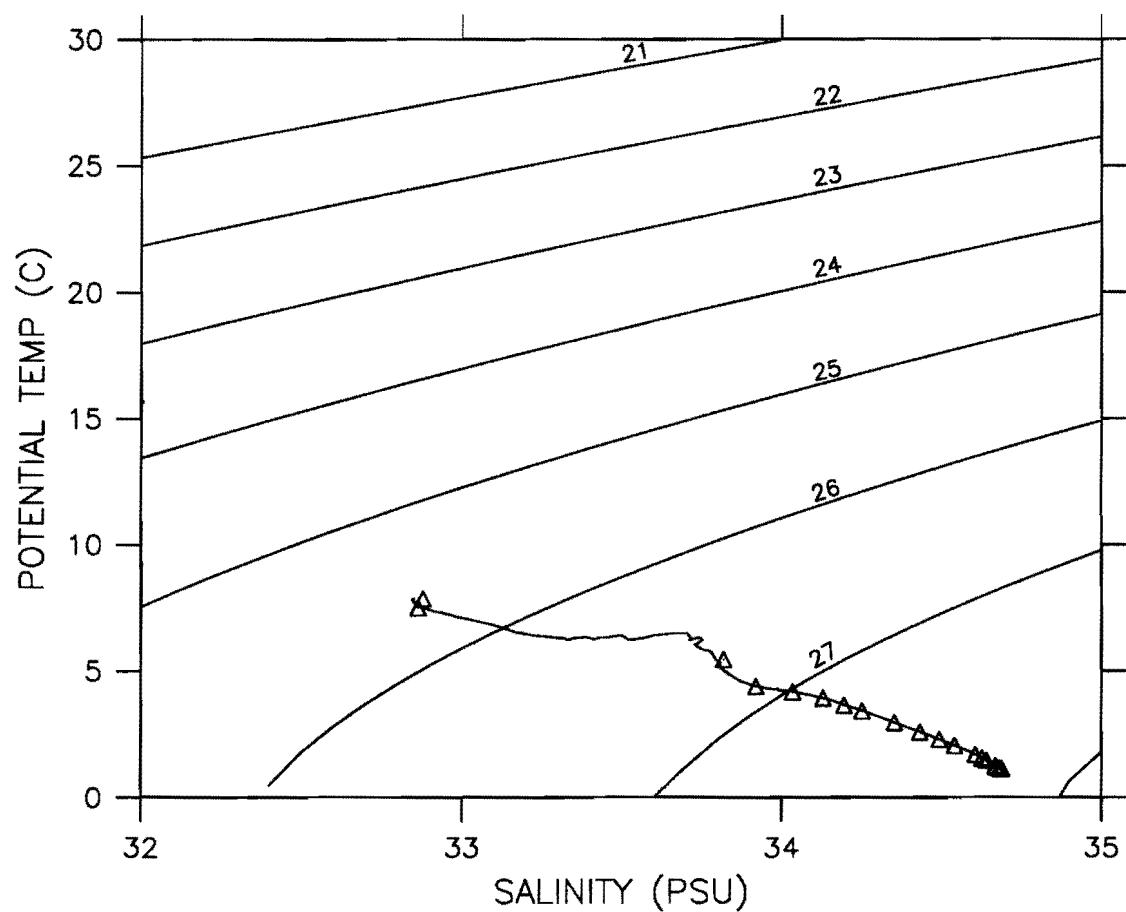


CAST CG2-91-DI -072 DATE 26 MAR 91 TIME 0405 GMT
 LAT 45 41.1N LONG 151 59.6W WEATHER 2 SEA STATE 4
 BAROMETER 26 WIND DIR 040 T SPD 18 KT VISIBILITY 7
 CLOUD 7 AMOUNT 8 DRY 08.3 WET 06.9 DEPTH 5250 M

PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	7.949	32.879	25.616	0.000
10	7.949	32.879	25.616	0.024
20	7.951	32.878	25.615	0.047
30	7.951	32.879	25.616	0.071
40	7.946	32.879	25.616	0.095
50	7.948	32.878	25.615	0.118
60	7.933	32.878	25.617	0.142
70	7.913	32.878	25.620	0.166
80	7.891	32.876	25.622	0.189
90	7.866	32.876	25.626	0.213
100	7.595	32.910	25.691	0.237
110	6.912	33.138	25.964	0.259
120	6.476	33.296	26.146	0.278
130	6.471	33.351	26.190	0.297
140	6.469	33.462	26.278	0.315
150	6.558	33.573	26.354	0.332
160	6.612	33.687	26.436	0.348
170	6.536	33.773	26.515	0.364
180	6.379	33.799	26.556	0.379
190	6.369	33.842	26.591	0.394
200	6.151	33.836	26.614	0.409
250	5.456	33.824	26.690	0.479
300	5.017	33.844	26.757	0.546
350	4.705	33.871	26.813	0.610
400	4.430	33.915	26.878	0.672
450	4.261	33.959	26.931	0.731
500	4.113	34.016	26.991	0.787
550	4.013	34.075	27.049	0.841
600	3.859	34.120	27.100	0.893
648	3.757	34.149	27.134	0.940

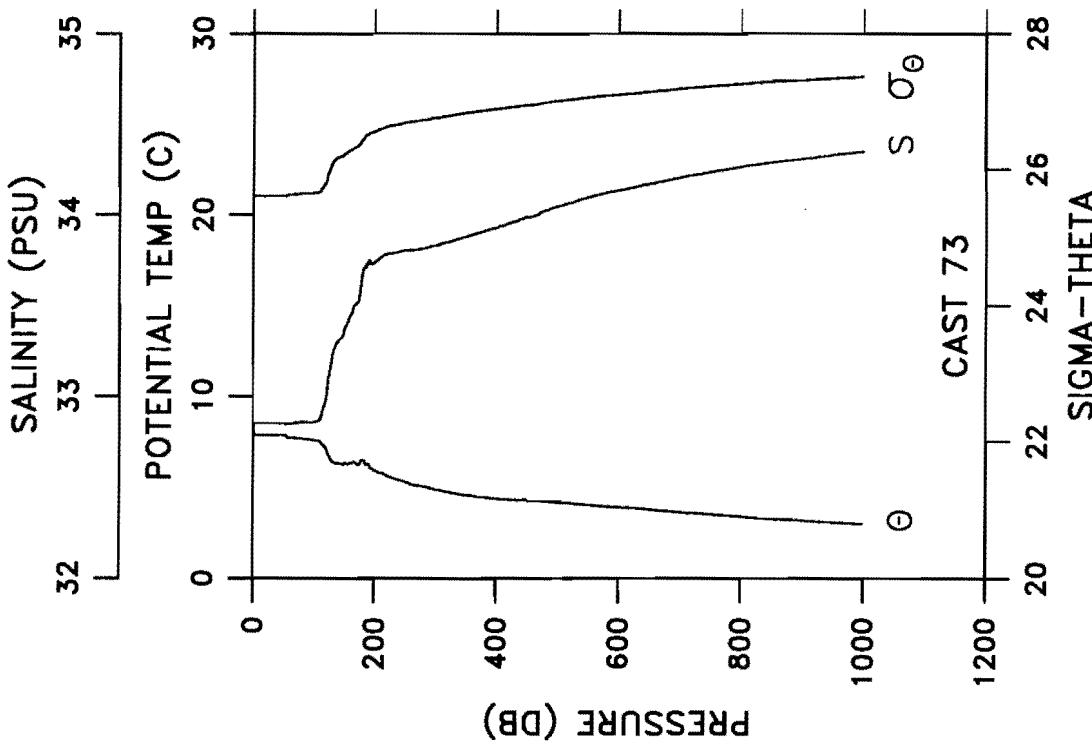


CAST CG2-91-DI -073 DATE 26 MAR 91 TIME 1006 GMT
LAT 46 20.2N LONG 151 59.3W

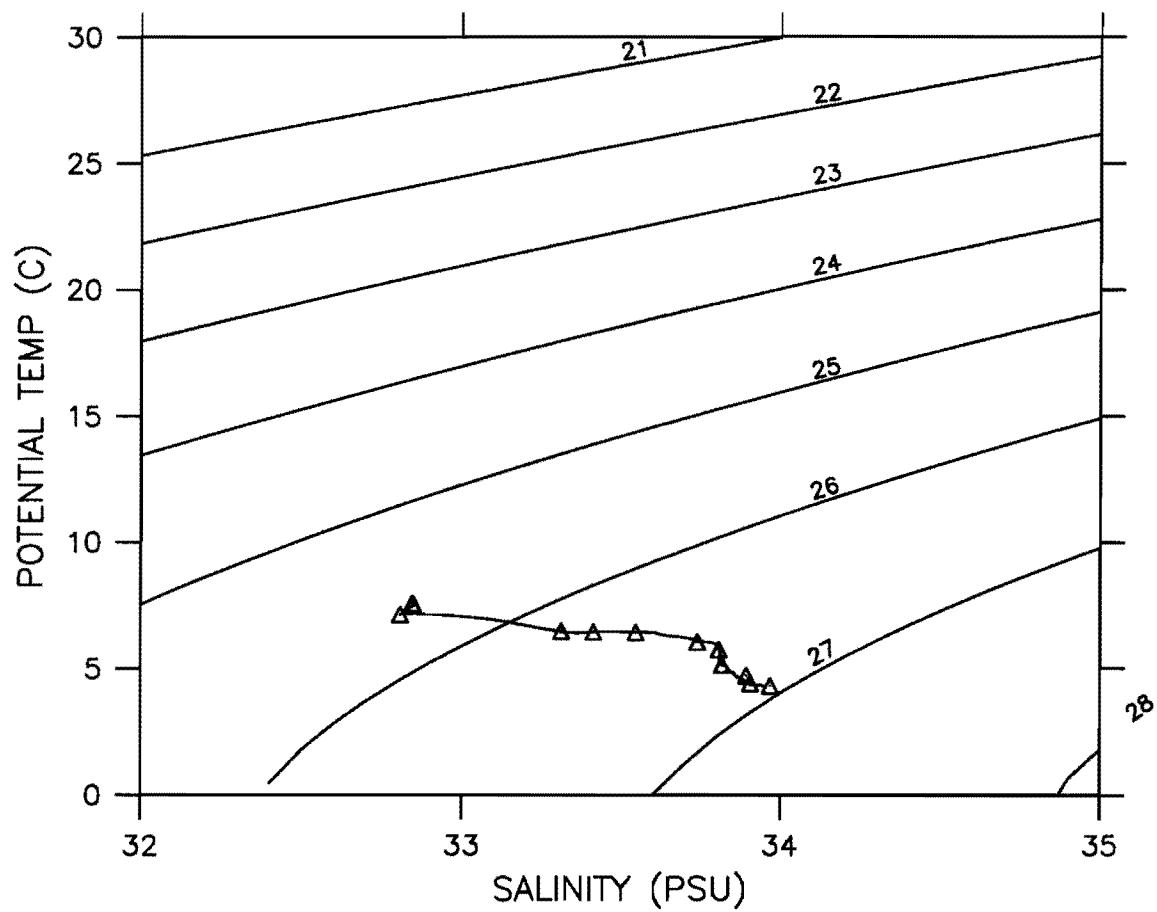


CAST CG2-91-DI -073 DATE 26 MAR 91 TIME 1006 GMT
 LAT 46° 20.2N LONG 151° 59.3W WEATHER 2 SEA STATE 4
 BAROMETER 24 WIND DIR 145 T SPD 22 KT VISIBILITY 8
 CLOUD 7 AMOUNT 8 DRY 08.1 WET 07.2 DEPTH 5402 M

PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	7.858	32.851	25.607	0.000
10	7.855	32.851	25.607	0.024
20	7.855	32.851	25.608	0.047
30	7.852	32.851	25.608	0.071
40	7.852	32.851	25.608	0.095
50	7.853	32.851	25.608	0.119
60	7.724	32.849	25.625	0.142
70	7.704	32.853	25.631	0.166
80	7.654	32.857	25.641	0.190
90	7.635	32.857	25.643	0.213
100	7.573	32.857	25.652	0.237
110	7.513	32.874	25.674	0.260
120	7.136	32.985	25.813	0.282
130	6.420	33.216	26.090	0.303
140	6.299	33.305	26.176	0.322
150	6.317	33.364	26.220	0.340
160	6.320	33.445	26.284	0.358
170	6.311	33.511	26.337	0.375
180	6.490	33.673	26.442	0.392
190	6.293	33.747	26.526	0.407
200	5.927	33.741	26.567	0.422
250	5.301	33.808	26.695	0.493
300	4.865	33.830	26.763	0.560
350	4.551	33.880	26.837	0.623
400	4.370	33.928	26.895	0.684
450	4.281	33.989	26.953	0.742
500	4.150	34.046	27.012	0.798
550	4.029	34.096	27.064	0.851
600	3.901	34.135	27.108	0.902
650	3.777	34.170	27.149	0.951
700	3.626	34.205	27.192	0.998
750	3.499	34.236	27.229	1.043
800	3.379	34.264	27.263	1.087
900	3.166	34.310	27.319	1.171
1000	2.977	34.349	27.368	1.250
1500	2.275	34.498	27.547	1.593
2000	1.833	34.583	27.651	1.876
2500	1.561	34.628	27.707	2.127
3000	1.371	34.654	27.742	2.361
3500	1.242	34.671	27.765	2.588
4000	1.163	34.681	27.778	2.812
4500	1.133	34.684	27.785	3.041
5000	1.122	34.687	27.785	3.279
5458	1.120	34.687	27.786	3.507

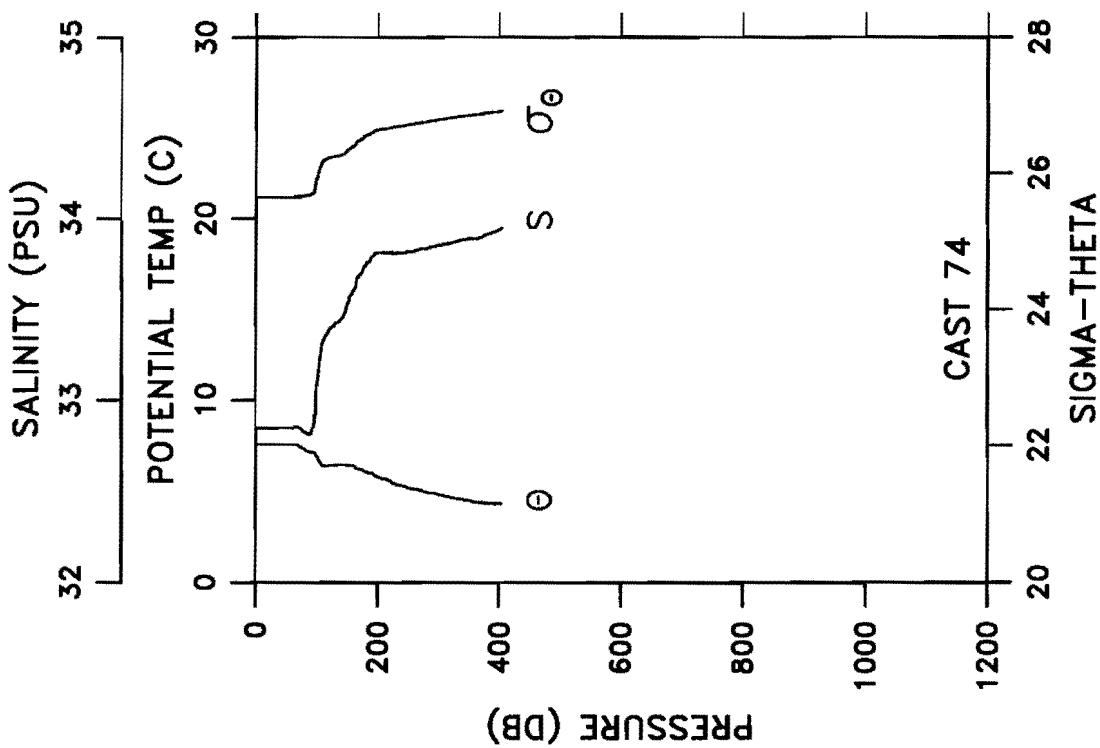


CAST CG2-91-DI -074 DATE 26 MAR 91 TIME 1621 GMT
LAT 47 00.3N LONG 151 59.9W

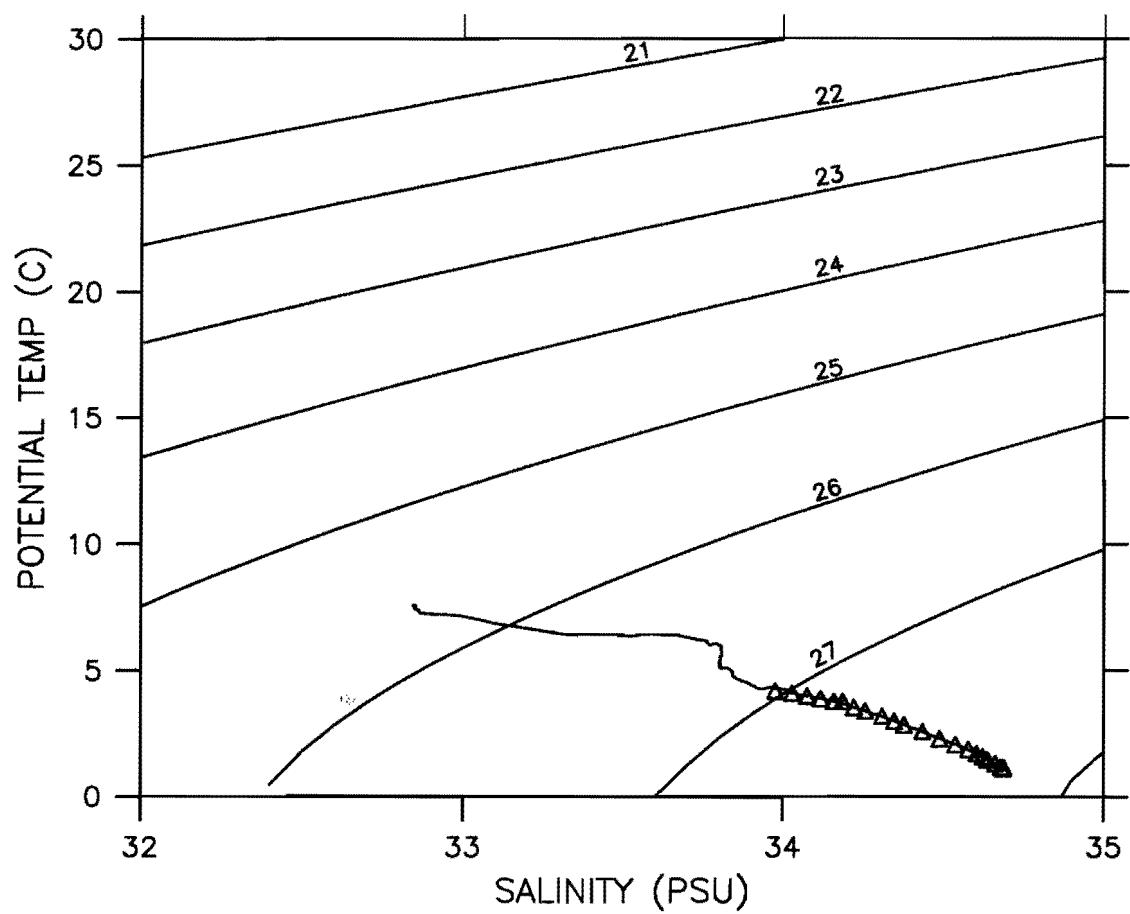


CAST CG2-91-DI -074 DATE 26 MAR 91 TIME 1621 GMT
 LAT 47 00.3N LONG 151 59.9W WEATHER 2 SEA STATE 5
 BAROMETER 19 WIND DIR 155 T SPD 24 KT VISIBILITY 7
 CLOUD 6 AMOUNT 6 DRY 08.7 WET 07.5 DEPTH 5167 M

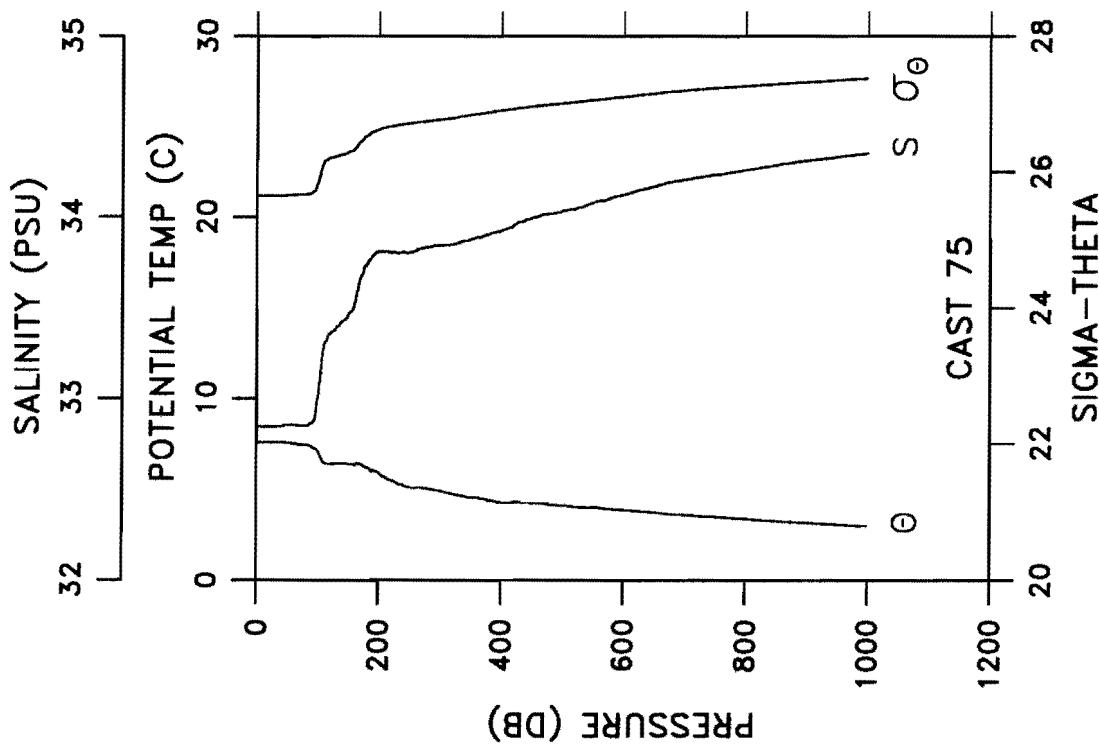
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH (PSU)	DELTA-D (DYN-M)
0	7.570	32.846	25.644	0.000
10	7.567	32.847	25.645	0.023
20	7.563	32.846	25.645	0.047
30	7.564	32.847	25.646	0.070
40	7.569	32.848	25.646	0.093
50	7.570	32.848	25.646	0.117
60	7.565	32.847	25.646	0.140
70	7.506	32.851	25.657	0.164
80	7.296	32.823	25.664	0.187
90	7.130	32.812	25.678	0.210
100	6.929	33.092	25.926	0.233
110	6.421	33.329	26.179	0.252
120	6.418	33.389	26.227	0.270
130	6.452	33.423	26.249	0.288
140	6.459	33.449	26.269	0.306
150	6.440	33.531	26.337	0.323
160	6.403	33.607	26.401	0.340
170	6.230	33.690	26.489	0.356
180	6.092	33.746	26.550	0.371
190	6.005	33.788	26.594	0.386
200	5.815	33.811	26.637	0.400
250	5.190	33.816	26.715	0.468
300	4.822	33.856	26.788	0.535
350	4.519	33.890	26.849	0.598
400	4.343	33.938	26.906	0.658
405	4.321	33.947	26.915	0.664



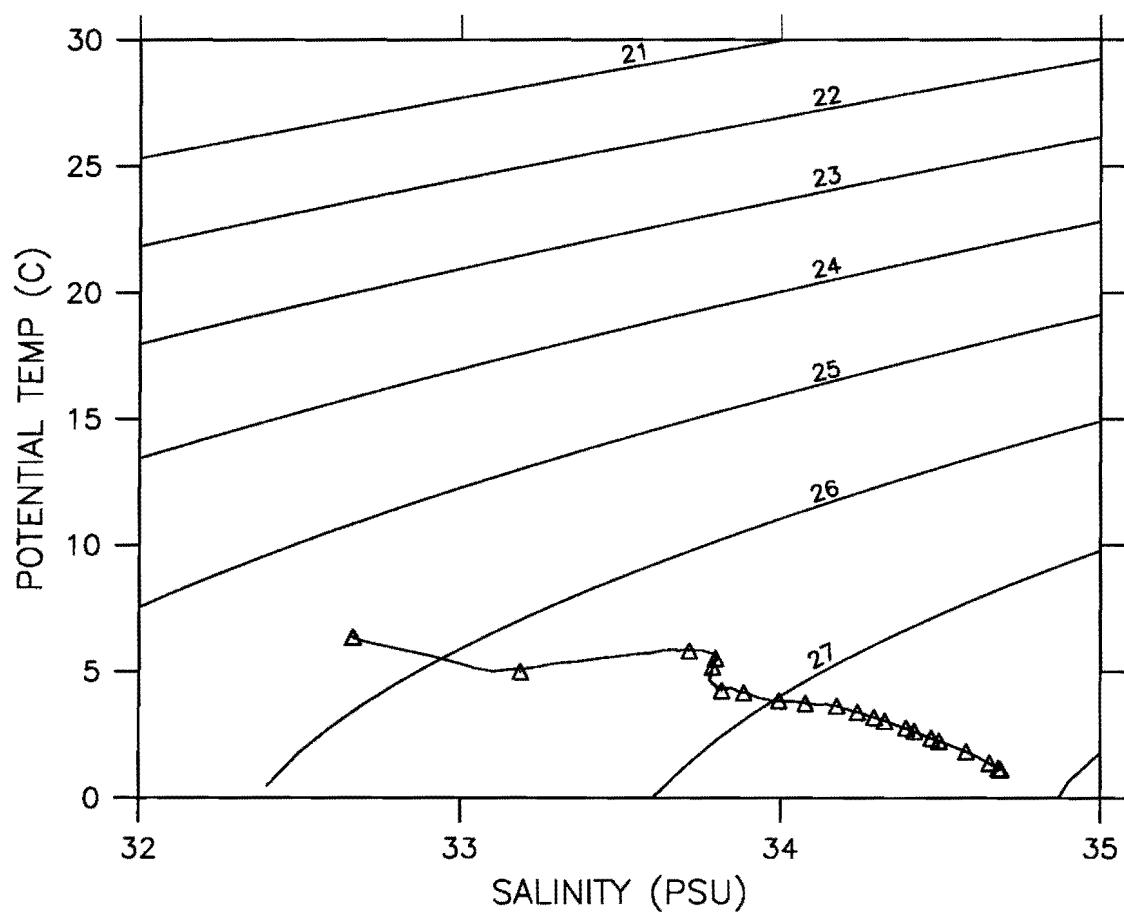
CAST CG2-91-DI -075 DATE 27 MAR 91 TIME 0739 GMT
LAT 47 00.0N LONG 152 00.0W



CAST CG2-91-DI -075		DATE 27 MAR 91		TIME 0739 GMT	
LAT 47 00.0N	LONG 152 00.0W	WEATHER 2	SEA STATE 4	VISIBILITY 7	DEPTH 5167 M
BAROMETER 20	WIND DIR 270 T	SPD 15 KT			
CLOUD 7	AMOUNT 8	DRY 07.2	WET 06.6		
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)	
0	7.577	32.844	25.642	0.000	
10	7.579	32.844	25.641	0.023	
20	7.567	32.844	25.643	0.047	
30	7.567	32.844	25.643	0.070	
40	7.565	32.845	25.644	0.094	
50	7.547	32.853	25.653	0.117	
60	7.503	32.851	25.658	0.140	
70	7.455	32.848	25.662	0.164	
80	7.441	32.847	25.663	0.187	
90	7.358	32.863	25.687	0.210	
100	7.129	33.000	25.826	0.233	
110	6.475	33.286	26.138	0.253	
120	6.397	33.357	26.205	0.271	
130	6.417	33.390	26.228	0.289	
140	6.424	33.423	26.253	0.307	
150	6.396	33.459	26.285	0.325	
160	6.356	33.518	26.337	0.342	
170	6.383	33.661	26.446	0.359	
180	6.212	33.733	26.525	0.374	
190	6.027	33.781	26.586	0.389	
200	5.923	33.809	26.621	0.404	
250	5.107	33.803	26.714	0.473	
300	4.917	33.844	26.768	0.539	
350	4.555	33.875	26.833	0.603	
400	4.275	33.925	26.902	0.663	
450	4.248	33.997	26.962	0.721	
500	4.103	34.033	27.007	0.777	
550	4.005	34.080	27.054	0.830	
600	3.864	34.123	27.103	0.881	
650	3.739	34.168	27.151	0.930	
700	3.582	34.207	27.198	0.977	
750	3.483	34.235	27.229	1.022	
800	3.377	34.260	27.259	1.066	
900	3.160	34.311	27.320	1.150	
1000	2.967	34.352	27.371	1.229	
1500	2.259	34.499	27.550	1.569	
2000	1.832	34.584	27.651	1.852	
2500	1.565	34.627	27.706	2.104	
3000	1.370	34.655	27.743	2.338	
3500	1.242	34.672	27.765	2.565	
4000	1.170	34.681	27.777	2.790	
4500	1.140	34.685	27.783	3.019	
5000	1.125	34.687	27.785	3.258	
5234	1.123	34.687	27.785	3.373	

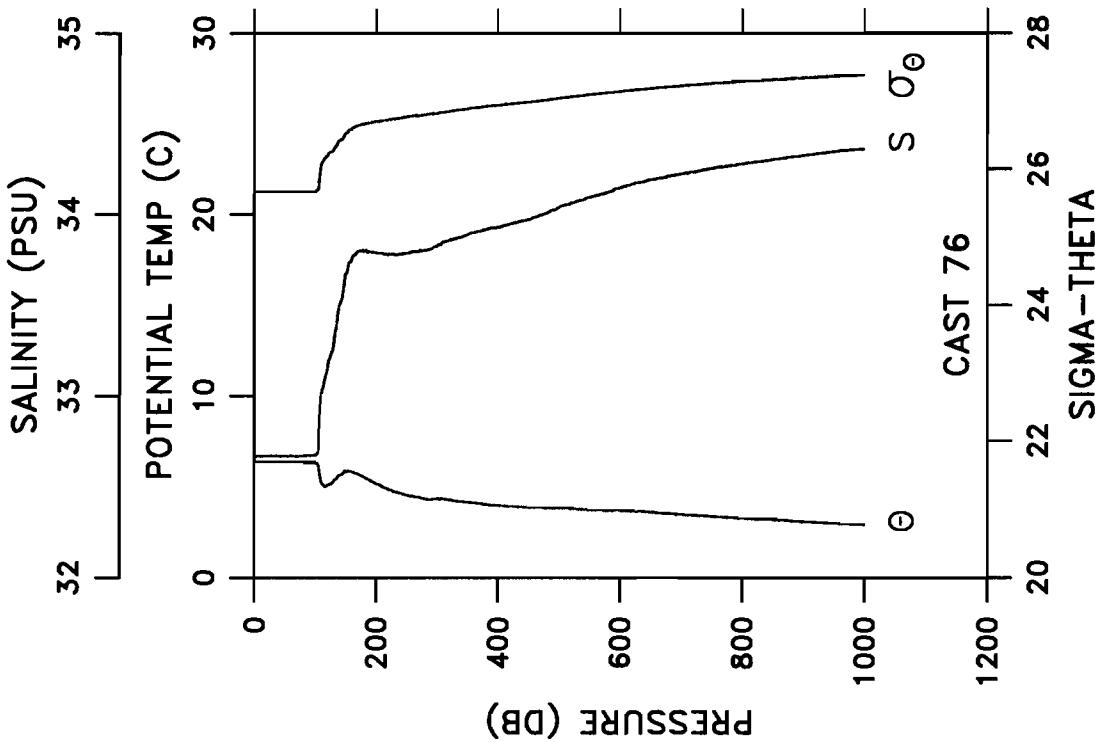


CAST CG2-91-DI -076 DATE 27 MAR 91 TIME 1545 GMT
LAT 47 39.9N LONG 152 00.4W

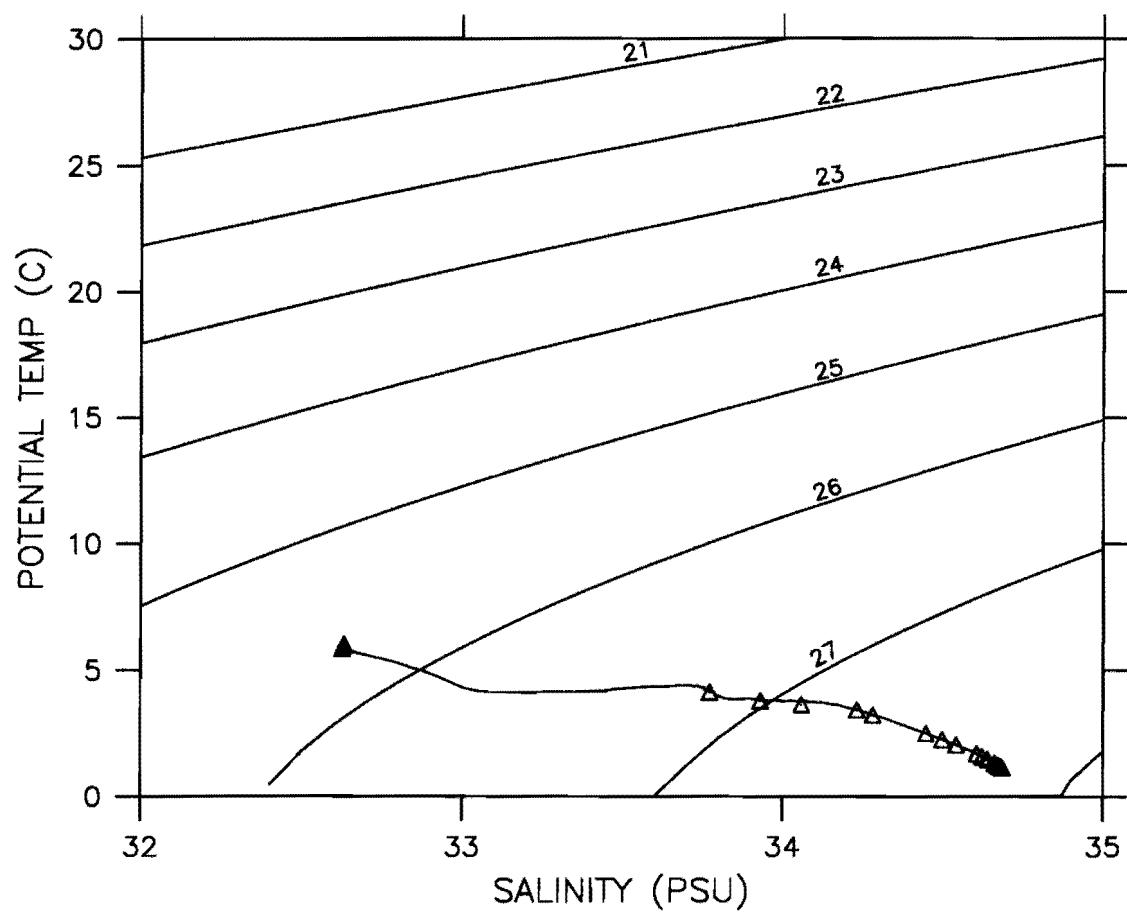


CAST CG2-91-DI -076		DATE 27 MAR 91		TIME 1545 GMT	
LAT 47 39.9N	LONG 152 00.4W	WEATHER 5	SEA STATE 7		
BAROMETER 34	WIND DIR 551 T	SPD 77 KT	VISIBILITY 2		
CLOUD 8	AMOUNT 2	DRY 06.4	WET 0502	DEPTH 5116 M	

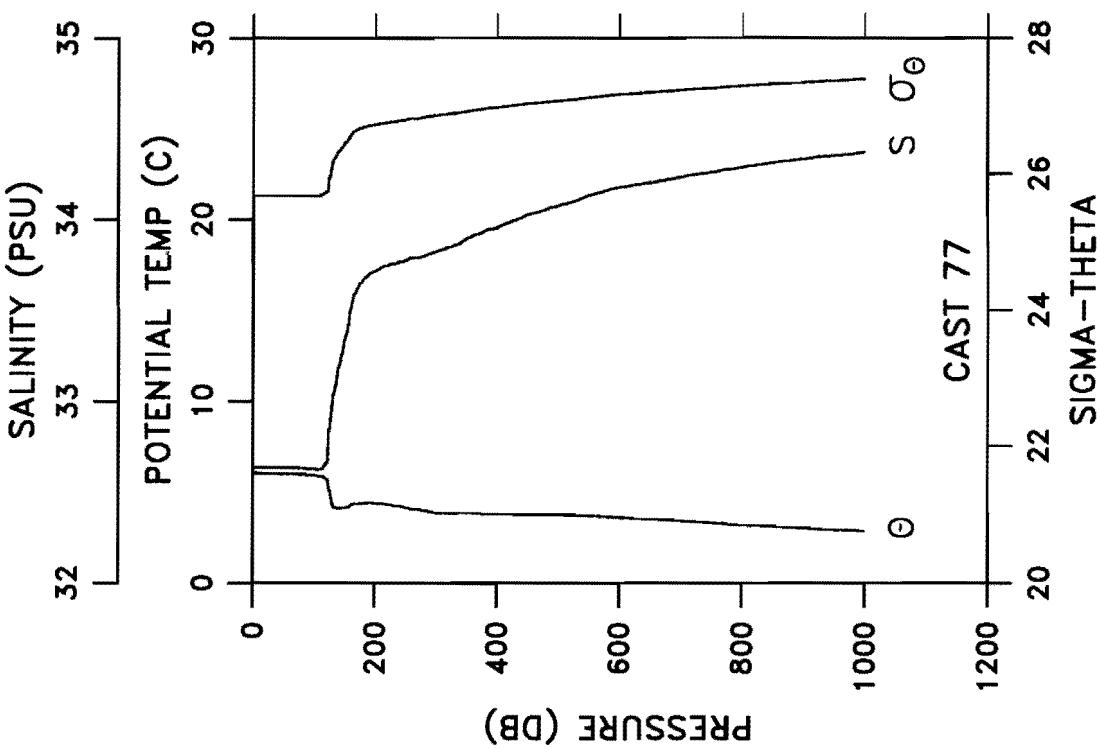
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	6.371	32.668	25.664	0.000
10	6.370	32.668	25.664	0.023
20	6.373	32.667	25.663	0.046
30	6.370	32.668	25.665	0.070
40	6.369	32.668	25.664	0.085
50	6.368	32.668	25.664	0.116
60	6.344	32.670	25.669	0.139
70	6.326	32.668	25.670	0.162
80	6.314	32.668	25.672	0.186
90	6.306	32.671	25.674	0.209
100	6.304	32.673	25.676	0.232
110	5.231	33.020	26.080	0.254
120	5.090	33.159	26.206	0.272
130	5.315	33.298	26.290	0.290
140	5.630	33.505	26.417	0.307
150	5.856	33.674	26.523	0.323
160	5.826	33.756	26.592	0.337
170	5.692	33.797	26.640	0.352
180	5.543	33.795	26.657	0.366
190	5.352	33.791	26.676	0.380
200	5.155	33.787	26.696	0.393
250	4.537	33.786	26.765	0.460
300	4.346	33.825	26.816	0.523
350	4.168	33.886	26.883	0.584
400	3.976	33.928	26.936	0.643
450	3.866	33.971	26.982	0.699
500	3.824	34.039	27.039	0.753
550	3.730	34.093	27.092	0.804
600	3.700	34.145	27.136	0.854
650	3.596	34.190	27.182	0.901
700	3.467	34.222	27.220	0.947
750	3.360	34.253	27.255	0.991
800	3.257	34.277	27.285	1.033
900	3.063	34.324	27.340	1.115
1000	2.898	34.360	27.383	1.192
1500	2.249	34.497	27.549	1.530
2000	1.840	34.579	27.647	1.814
2500	1.568	34.624	27.704	2.086
3000	1.366	34.653	27.742	2.301
3500	1.241	34.669	27.763	2.527
4000	1.168	34.679	27.776	2.753
5000	1.128	34.684	27.783	3.222
5150	1.127	34.685	27.784	3.286



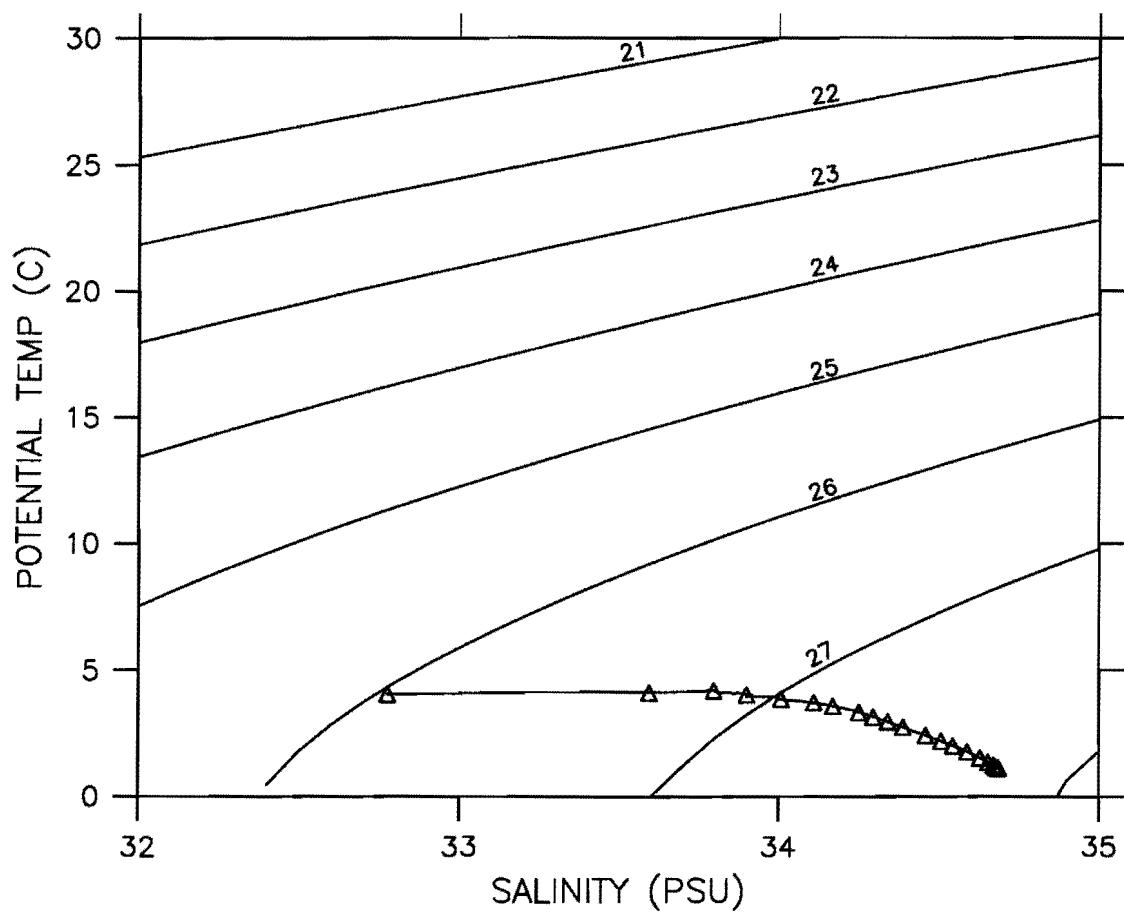
CAST CG2-91-DI -077 DATE 27 MAR 91 TIME 2320 GMT
LAT 48 19.5N LONG 152 00.3W

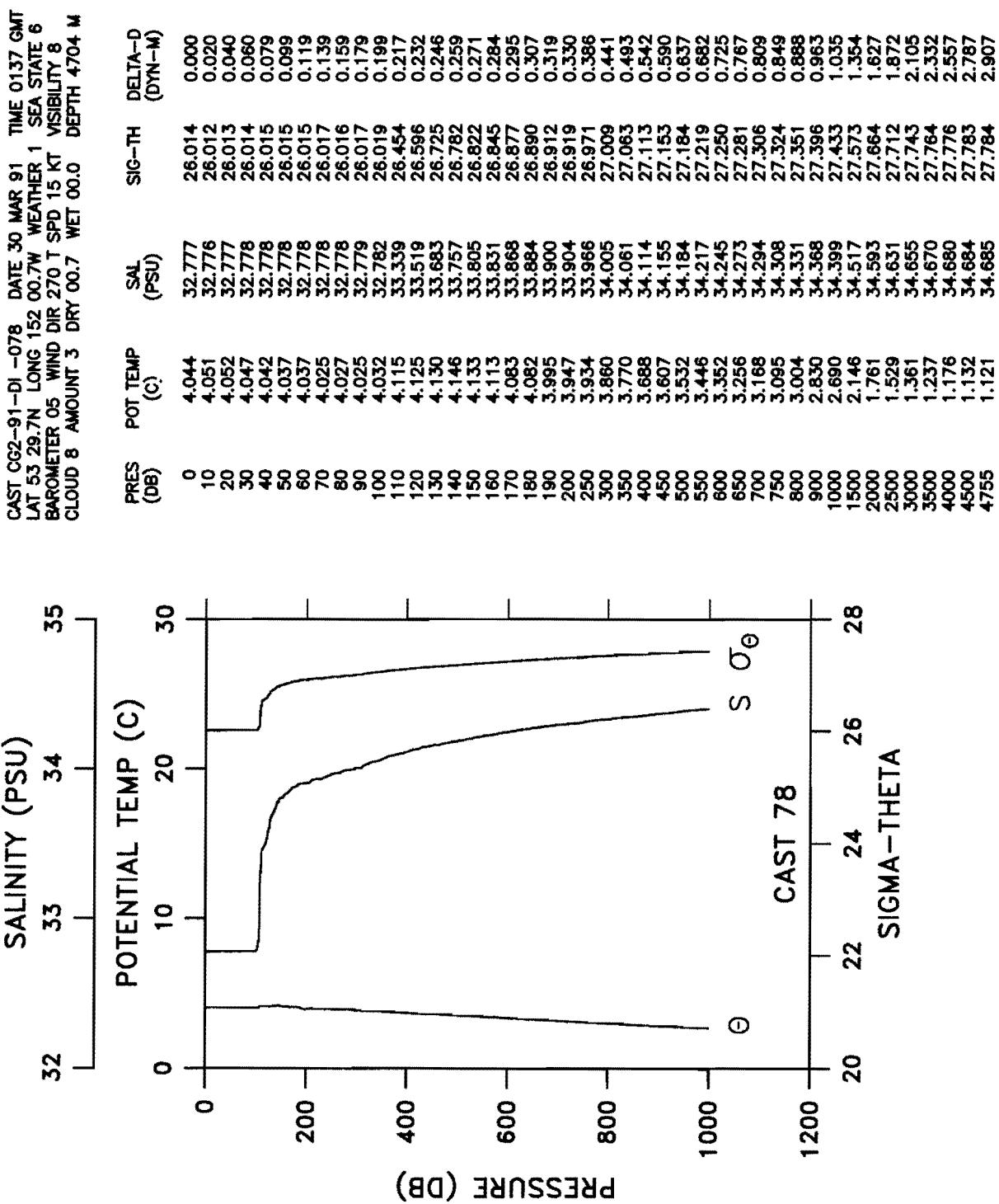


CAST CG2-91-DI -077		DATE 27 MAR 91	TIME 2320 GMT	WEATHER 2		SEA STATE 6
LAT 48 19.5N	LONG 152 00.3W			CLOUD 7	AMOUNT 8	VISIBILITY 0
BAROMETER 19		WIND DIR 210 T	SPD 25 KT	WET 05.4	DEPTH 5043 M	
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DN-M)		
0	6.035	32.634	25.680	0.000		
10	6.050	32.634	25.680	0.023		
20	6.020	32.634	25.681	0.046		
30	6.016	32.634	25.681	0.069		
40	5.998	32.634	25.684	0.092		
50	5.995	32.634	25.684	0.115		
60	5.977	32.632	25.685	0.138		
70	5.973	32.631	25.684	0.161		
80	5.942	32.629	25.687	0.184		
90	5.921	32.627	25.688	0.207		
100	5.901	32.625	25.688	0.230		
110	5.842	32.622	25.693	0.253		
120	5.695	32.684	25.744	0.276		
130	4.395	32.985	26.143	0.297		
140	4.107	33.185	26.332	0.315		
150	4.132	33.332	26.446	0.332		
160	4.270	33.500	26.565	0.347		
170	4.339	33.614	26.649	0.361		
180	4.368	33.660	26.682	0.375		
190	4.398	33.699	26.710	0.389		
200	4.379	33.714	26.724	0.402		
250	4.143	33.773	26.795	0.467		
300	3.867	33.822	26.862	0.528		
350	3.859	33.892	26.919	0.587		
400	3.778	33.952	26.975	0.644		
450	3.770	34.026	27.035	0.698		
500	3.746	34.075	27.076	0.749		
550	3.692	34.133	27.127	0.799		
600	3.602	34.176	27.171	0.847		
650	3.507	34.202	27.201	0.893		
700	3.425	34.232	27.232	0.938		
750	3.321	34.259	27.264	0.982		
800	3.196	34.286	27.297	1.024		
900	3.018	34.333	27.351	1.104		
1000	2.834	34.371	27.398	1.180		
1500	2.256	34.497	27.548	1.513		
2000	1.852	34.579	27.646	1.797		
2500	1.580	34.624	27.702	2.051		
3000	1.380	34.652	27.740	2.287		
3500	1.242	34.670	27.764	2.514		
4000	1.165	34.680	27.777	2.739		
4500	1.142	34.684	27.782	2.969		
5000	1.129	34.686	27.784	3.208		
5114	1.129	34.685	27.784	3.264		

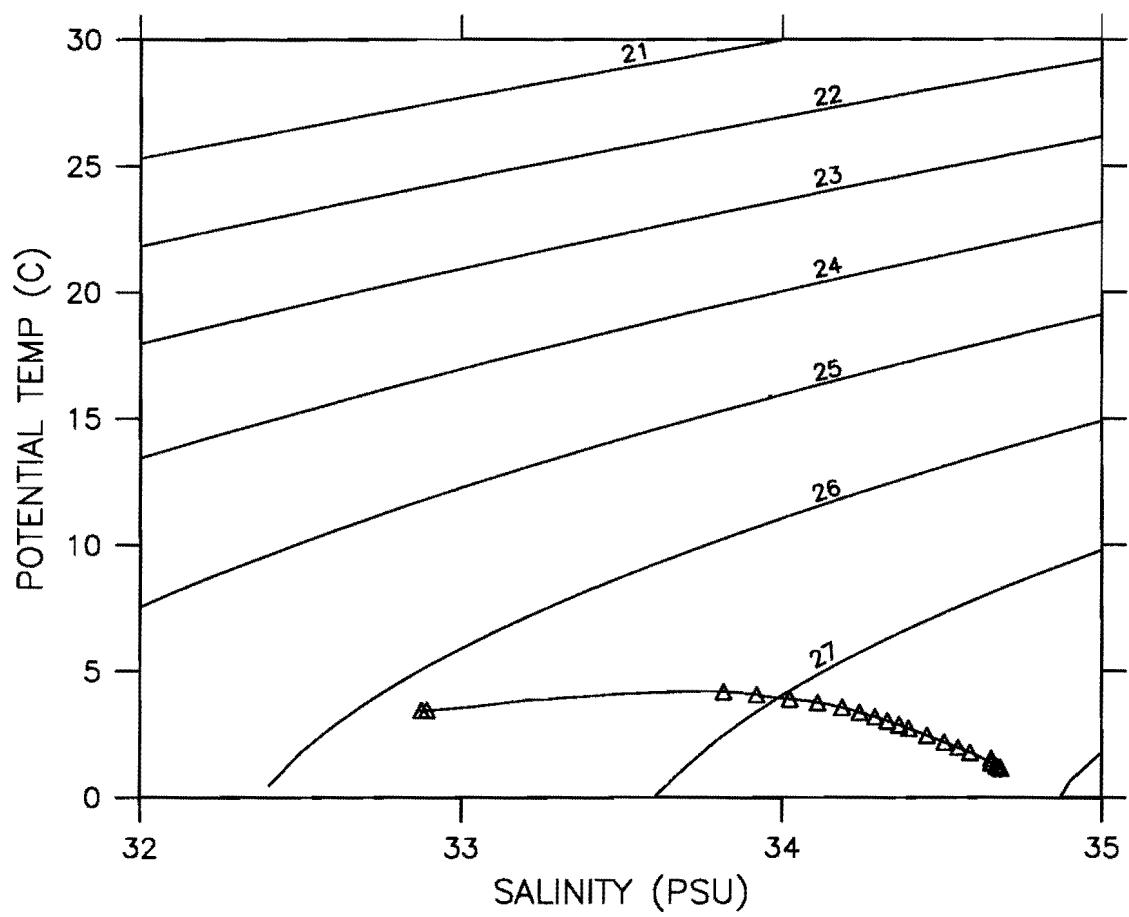


CAST CG2-91-DI -078 DATE 30 MAR 91 TIME 0137 GMT
LAT 53 29.7N LONG 152 00.7W

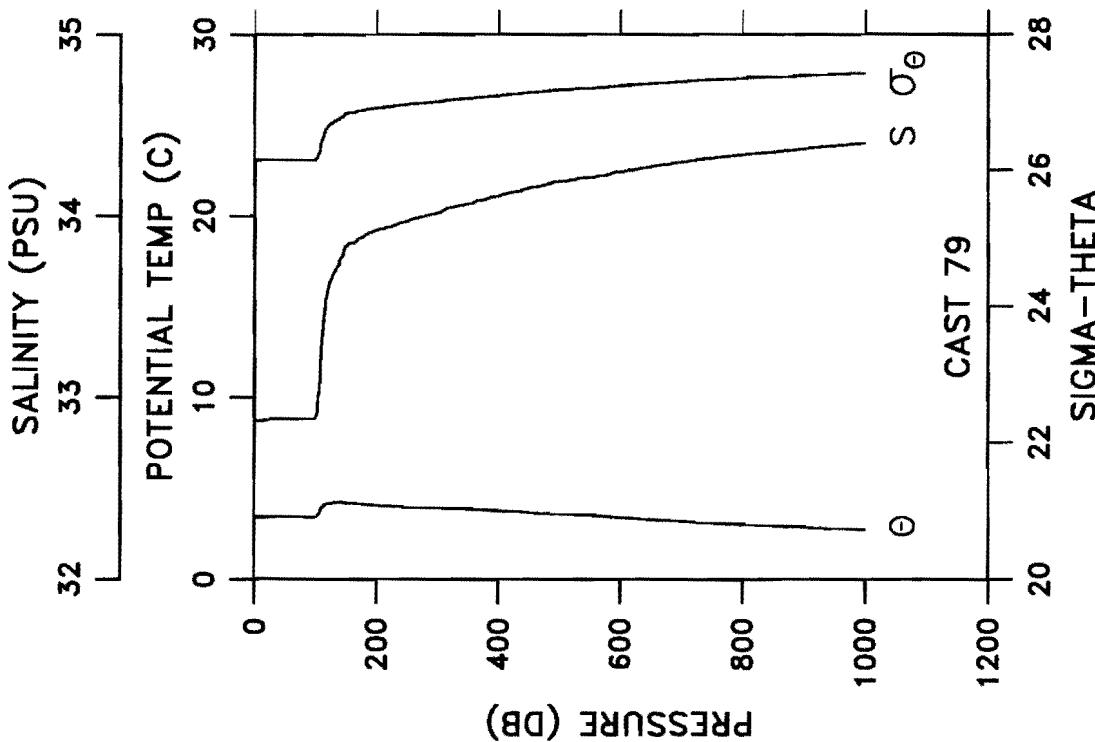




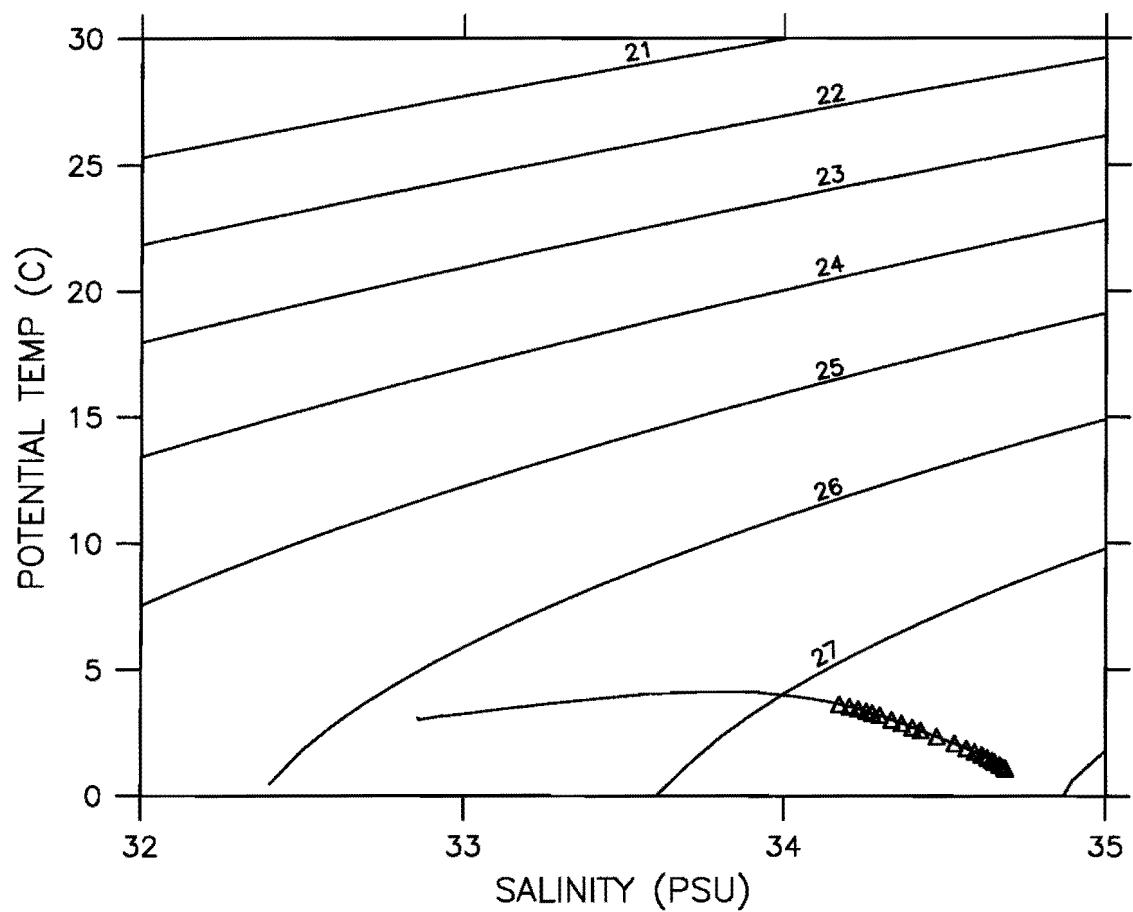
CAST CG2-91-DI -079 DATE 30 MAR 91 TIME 1117 GMT
LAT 54 39.8N LONG 151 59.8W



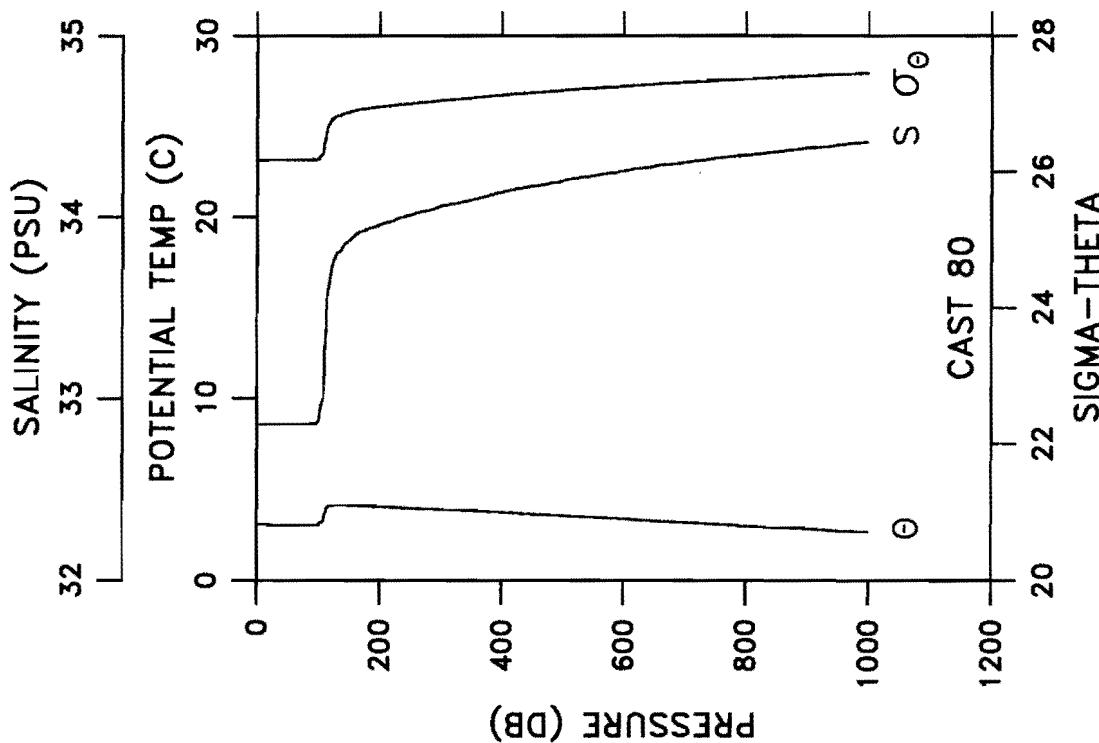
CAST CG2-91-DI -079		DATE 30 MAR 91		TIME 1117 GMT	
LAT 54 39.8N	LONG 151 59.8W	WEATHER 1	SEA STATE 6	CLOUD 8	WIND DIR 295 T
BAROMETER 05	SPD 22 KT	VISIBILITY 7	AMOUNT 5	DRY 00.9	WET 00.0
DEPTH 4291 M					
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DN-M)	
0	3.415	32.874	26.151	0.000	
10	3.414	32.874	26.151	0.019	
20	3.426	32.877	26.153	0.037	
30	3.430	32.880	26.154	0.056	
40	3.431	32.881	26.155	0.074	
50	3.432	32.882	26.156	0.093	
60	3.431	32.882	26.156	0.111	
70	3.431	32.881	26.155	0.130	
80	3.424	32.882	26.157	0.148	
90	3.421	32.883	26.157	0.167	
100	3.429	32.890	26.163	0.185	
110	3.930	33.306	26.446	0.203	
120	4.152	33.596	26.854	0.218	
130	4.188	33.690	26.725	0.231	
140	4.209	33.758	26.777	0.244	
150	4.182	33.832	26.838	0.256	
160	4.163	33.850	26.855	0.269	
170	4.123	33.875	26.879	0.280	
180	4.098	33.891	26.894	0.292	
190	4.076	33.908	26.910	0.304	
200	4.060	33.921	26.922	0.315	
250	3.960	33.971	26.972	0.371	
300	3.907	34.016	27.013	0.425	
350	3.837	34.066	27.060	0.477	
400	3.760	34.107	27.100	0.527	
450	3.653	34.154	27.148	0.575	
500	3.560	34.189	27.185	0.622	
550	3.492	34.210	27.209	0.667	
600	3.365	34.244	27.248	0.711	
650	3.268	34.269	27.277	0.754	
700	3.170	34.296	27.308	0.795	
750	3.071	34.318	27.334	0.834	
800	3.002	34.335	27.354	0.873	
900	2.856	34.369	27.394	0.949	
1000	2.707	34.400	27.432	1.020	
1500	2.138	34.518	27.574	1.339	
2000	1.785	34.587	27.657	1.613	
2500	1.532	34.630	27.711	1.860	
3000	1.373	34.652	27.740	2.094	
3500	1.255	34.669	27.762	2.322	
4000	1.190	34.678	27.774	2.549	
4346	1.146	34.683	27.781	2.709	



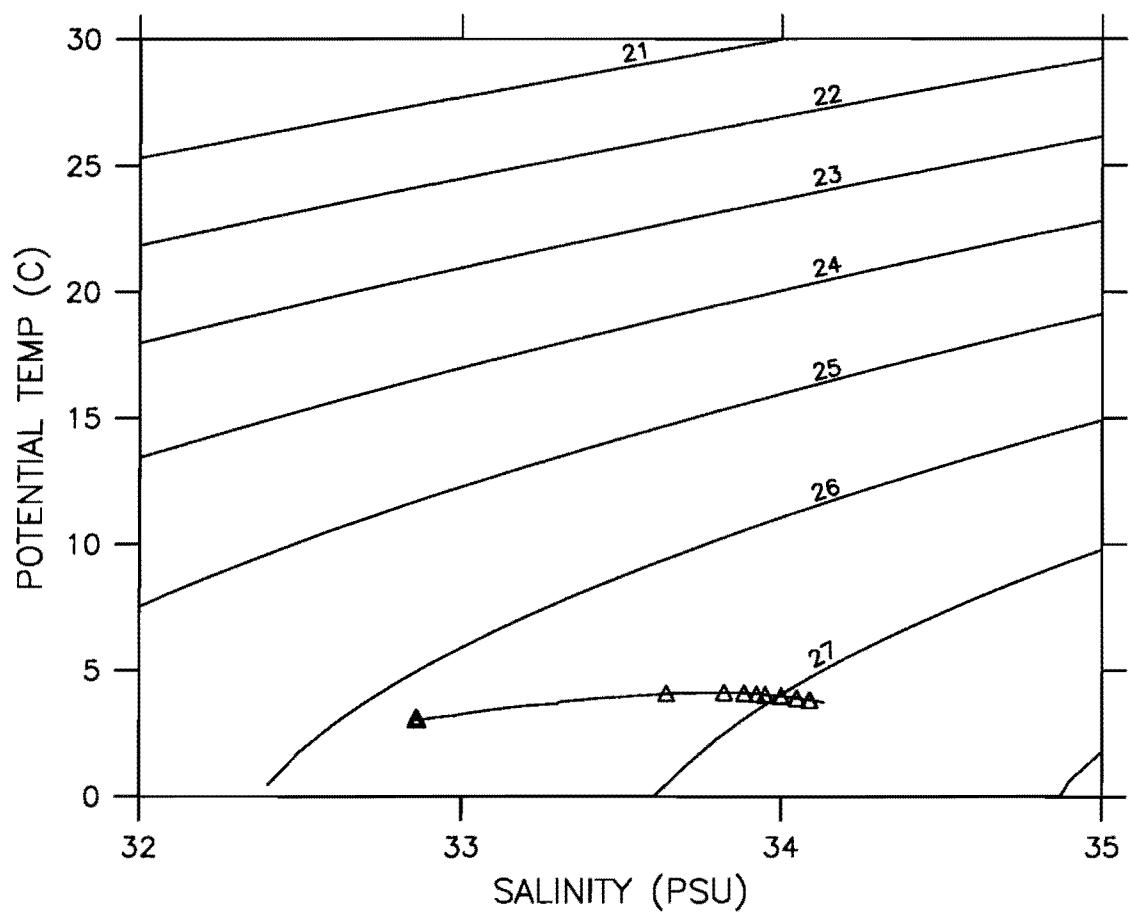
CAST CG2-91-DI -080 DATE 31 MAR 91 TIME 0757 GMT
LAT 55 26.7N LONG 152 37.7W



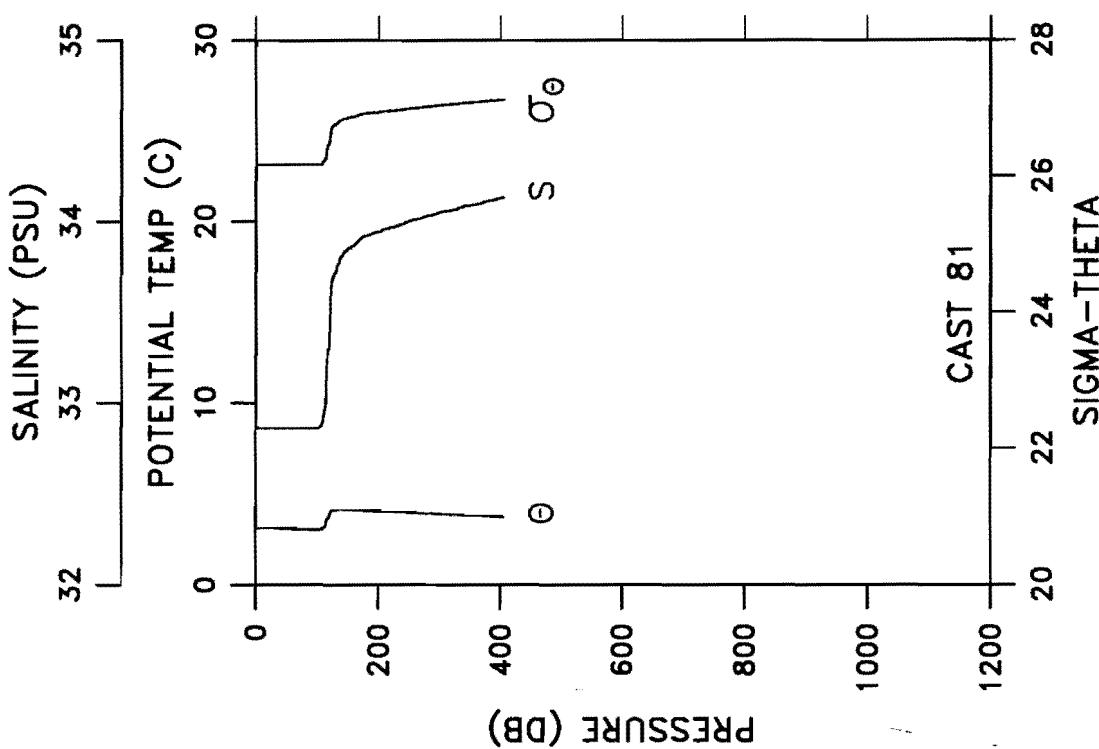
CAST CG2-91-DI-080 DATE 31 MAR 91 TIME 0757 GWT
 LAT 55 26.7N LONG 152 37.7W WEATHER 2 SEA STATE 1
 BAROMETER 11 WIND DIR 050 T SPD 04 KT VISIBILITY 8
 CLOUD 0 AMOUNT 6 DRY 02.3 WET 01.0 DEPTH 5158 M



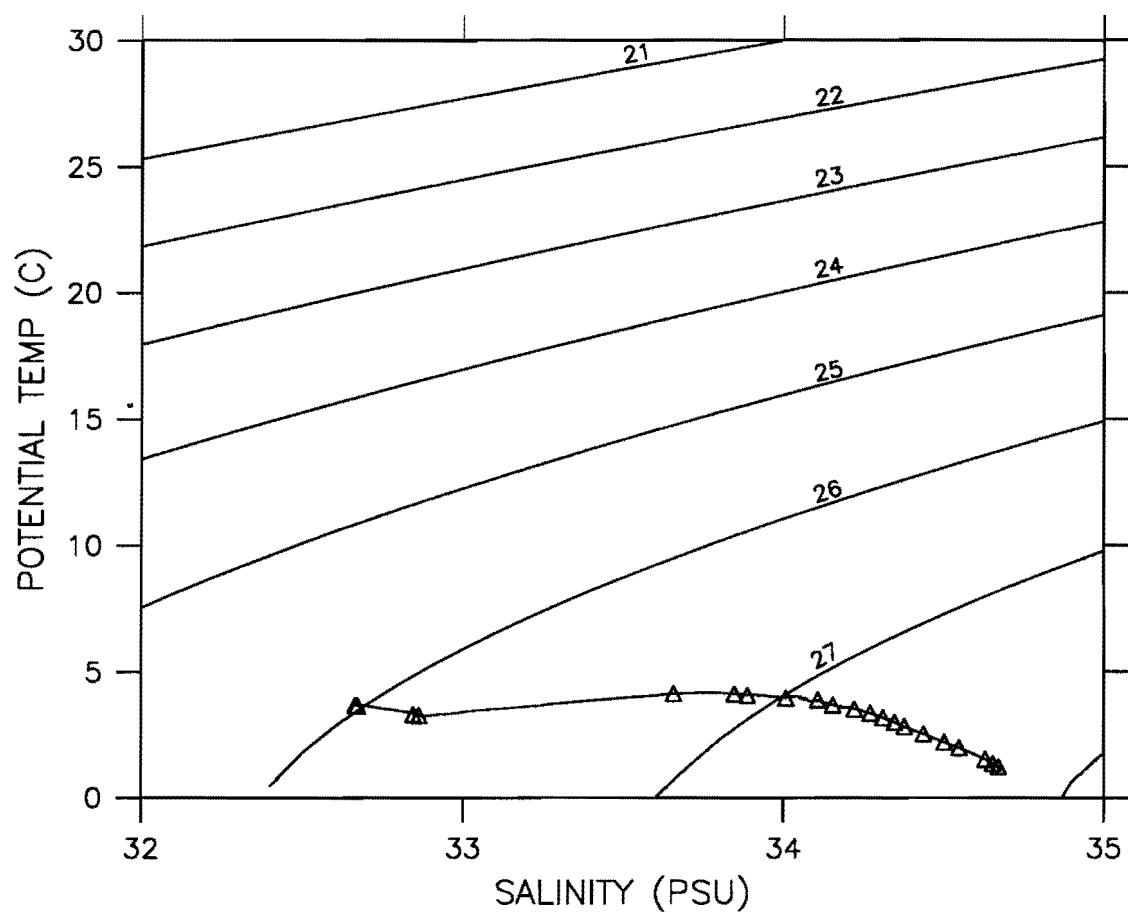
CAST CG2-91-DI -081 DATE 31 MAR 91 TIME 1143 GMT
LAT 55 27.3N LONG 152 33.5W



CAST CG2-91-DI -081 DATE 31 MAR 91 TIME 1143 GMT
 LAT 55 27.3N LONG 152 33.5W WEATHER 1 SEA STATE 1
 BAROMETER 09 WIND DIR 120 T SPD 05 KT VISIBILITY 8
 CLOUD 8 AMOUNT 2 DRY 01.6 WET 00.5 DEPTH 5159 M

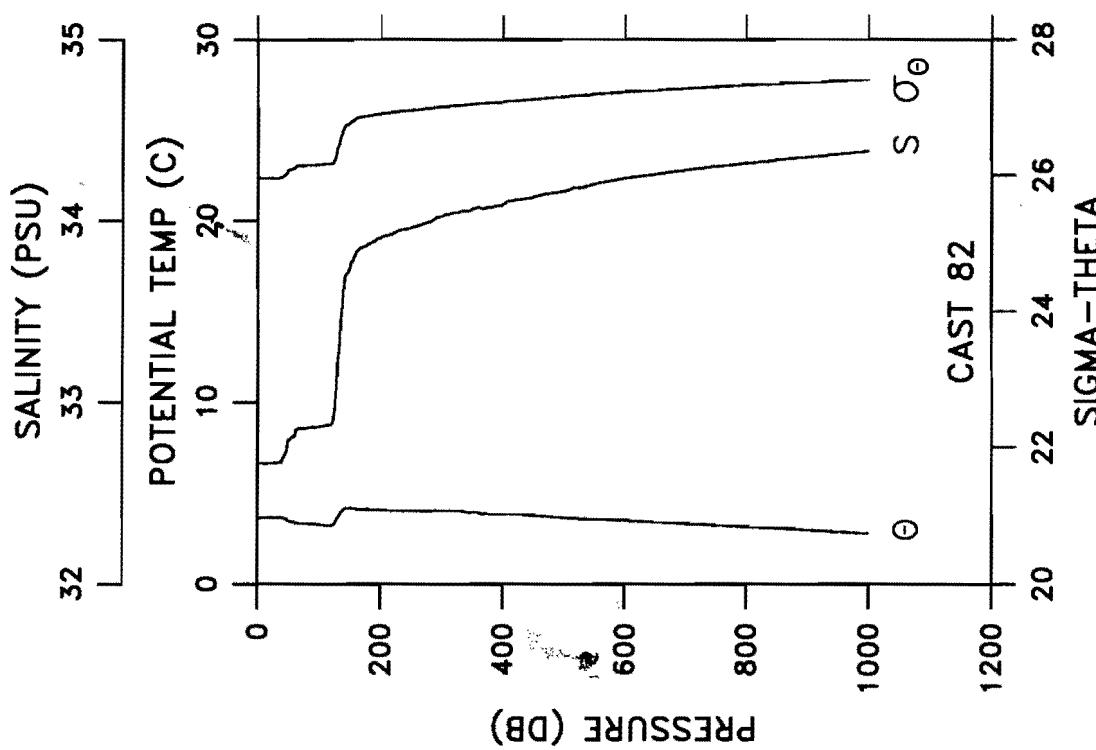


CAST CG2-91-DI -082 DATE 31 MAR 91 TIME 1715 GMT
LAT 55 51.9N LONG 152 55.7W

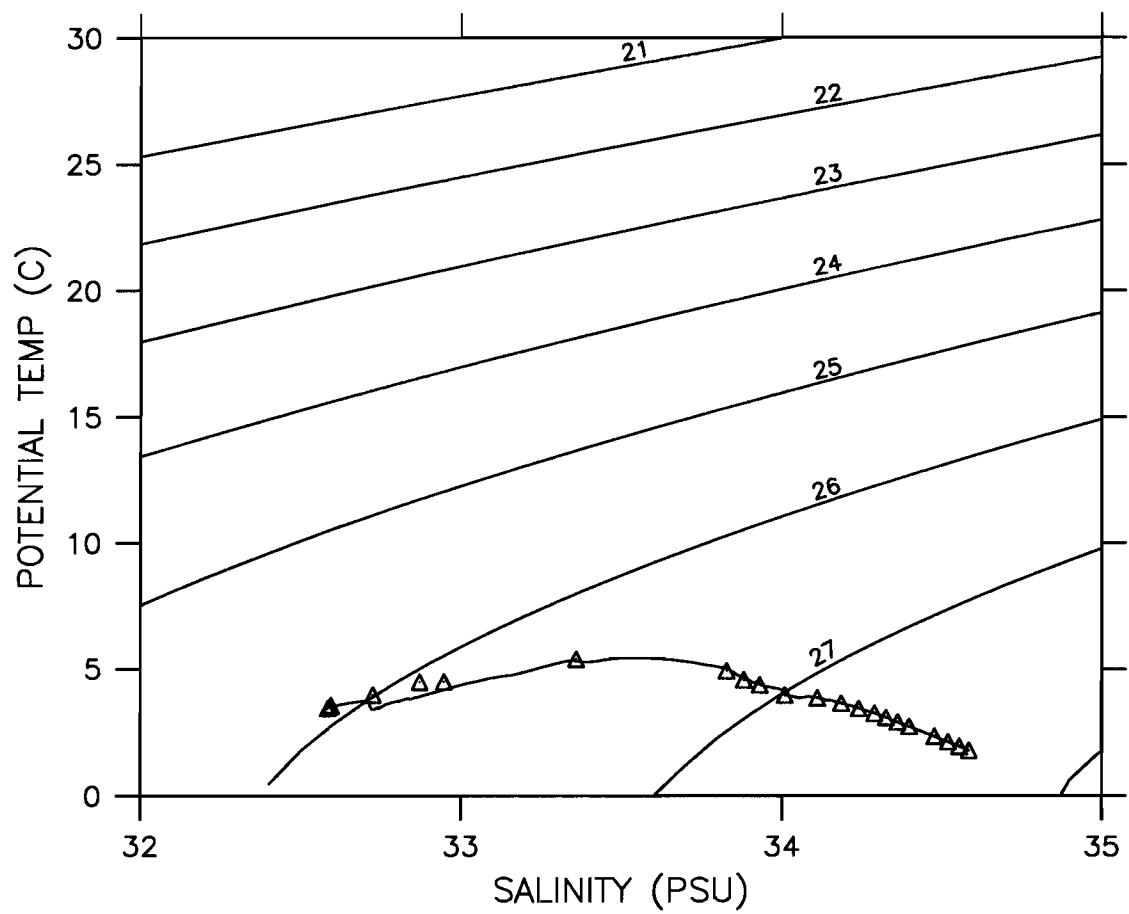


CAST CG2-91-DI -082 DATE 31 MAR 91 TIME 1715 GMT
 LAT 55 51'N LONG 152 55.7'W WEATHER 8 SEA STATE 3
 BAROMETER 05 WIND DIR 135 T SPD 10 KT VISIBILITY 7
 CLOUD 6 AMOUNT 5 DRY 01.9 WET 00.9 DEPTH 4051 M

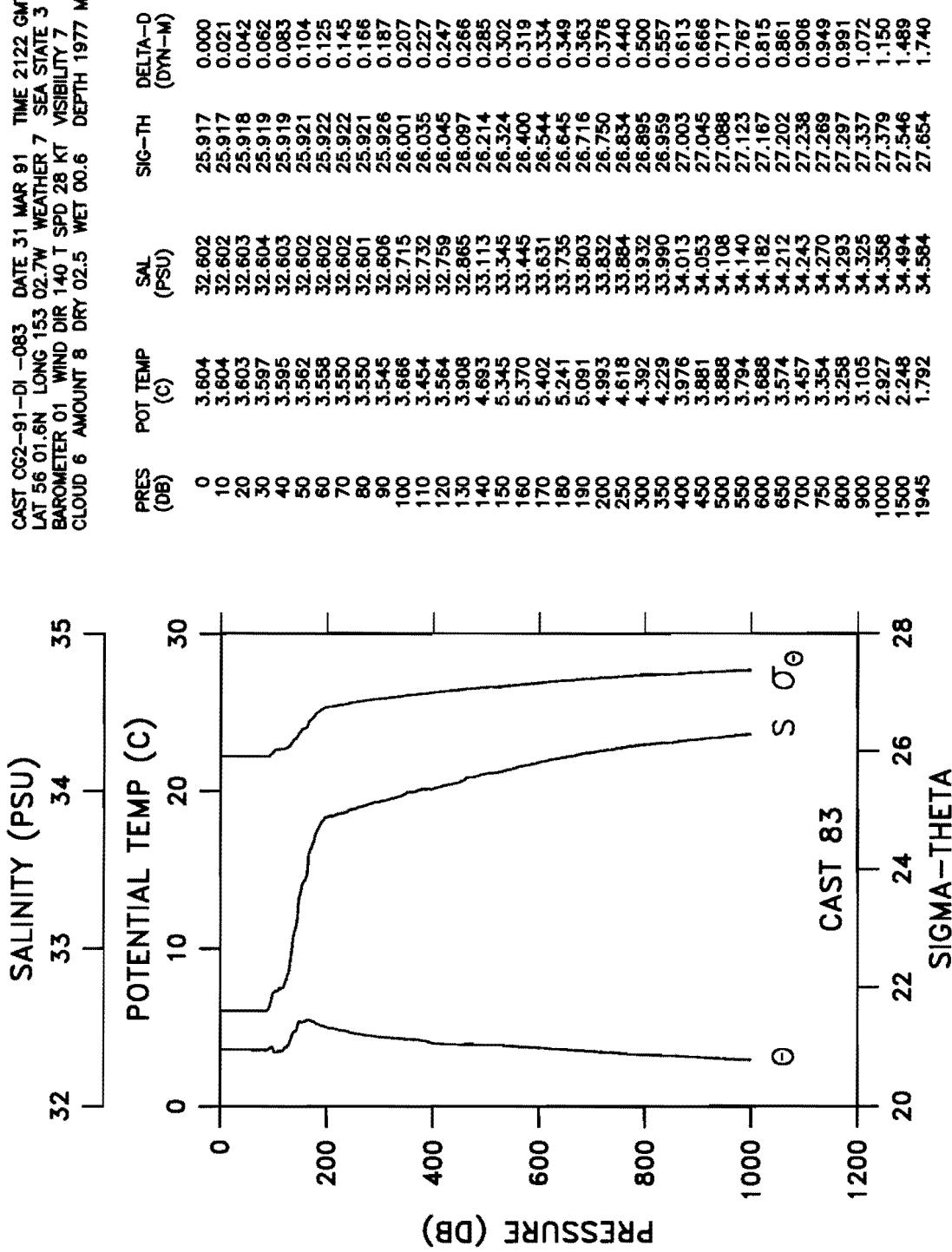
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)
0	3.661	32.664	25.961	0.000
10	3.666	32.663	25.959	0.020
20	3.664	32.664	25.961	0.041
30	3.669	32.666	25.962	0.061
40	3.658	32.681	25.975	0.081
50	3.468	32.792	26.081	0.101
60	3.424	32.814	26.103	0.120
70	3.339	32.853	26.142	0.139
80	3.331	32.856	26.144	0.158
90	3.315	32.860	26.149	0.176
100	3.279	32.863	26.155	0.195
110	3.235	32.870	26.164	0.214
120	3.232	32.874	26.167	0.232
130	3.643	33.223	26.408	0.250
140	4.092	33.619	26.679	0.265
150	4.176	33.735	26.762	0.278
160	4.148	33.823	26.835	0.290
170	4.114	33.854	26.863	0.302
180	4.113	33.870	26.876	0.314
190	4.086	33.887	26.892	0.326
200	4.084	33.906	26.908	0.338
250	4.026	33.961	26.957	0.394
300	4.015	34.024	27.008	0.449
350	3.957	34.066	27.048	0.501
400	3.815	34.086	27.078	0.552
450	3.761	34.132	27.120	0.602
500	3.650	34.163	27.156	0.650
550	3.575	34.202	27.194	0.696
600	3.499	34.233	27.227	0.741
650	3.411	34.254	27.252	0.784
700	3.321	34.278	27.279	0.827
750	3.238	34.298	27.303	0.868
800	3.140	34.317	27.327	0.909
900	2.977	34.350	27.368	0.987
1000	2.796	34.383	27.411	1.061
1500	2.154	34.514	27.570	1.387
2000	1.769	34.589	27.660	1.659
2500	1.525	34.630	27.711	1.906
3000	1.354	34.655	27.744	2.138
3500	1.229	34.671	27.765	2.364
4000	1.155	34.681	27.779	2.587
4078	1.152	34.681	27.779	2.623



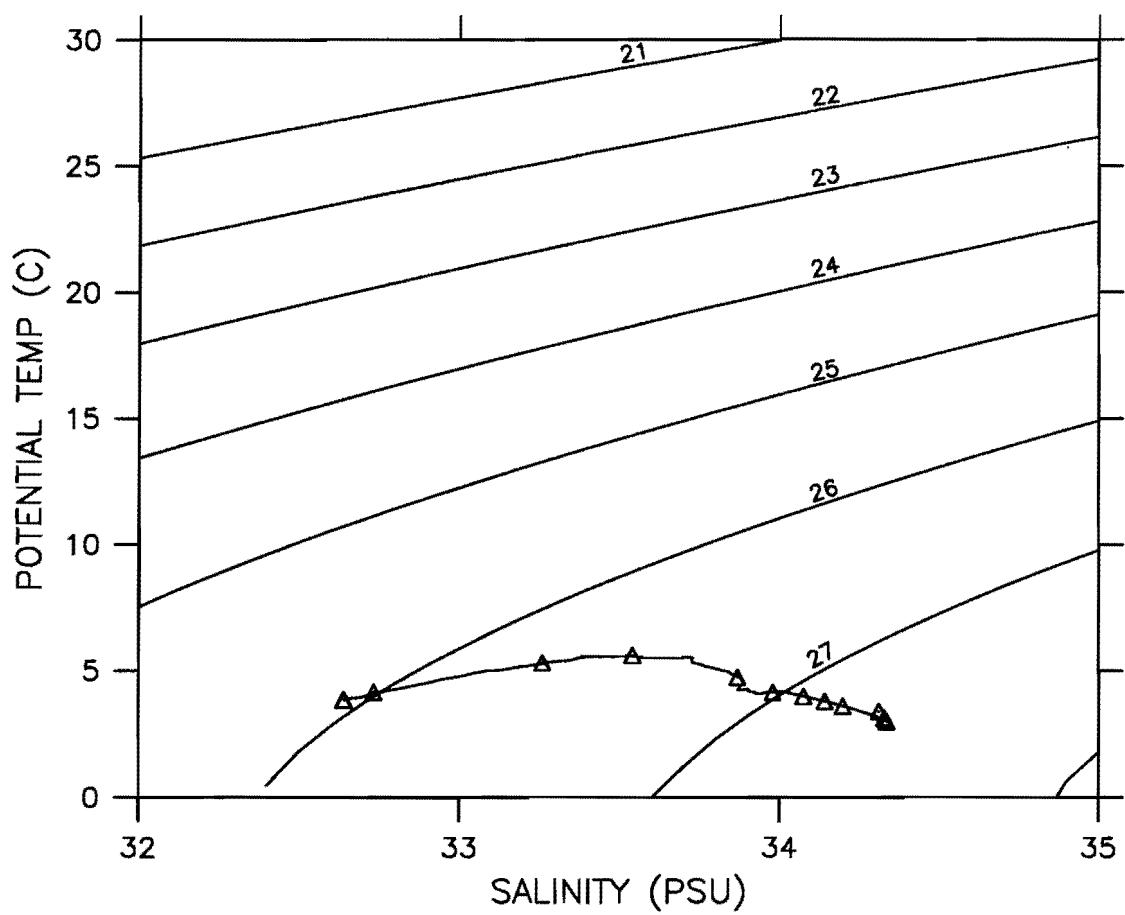
CAST CG2-91-DI -083 DATE 31 MAR 91 TIME 2122 GMT
LAT 56 01.6N LONG 153 02.7W



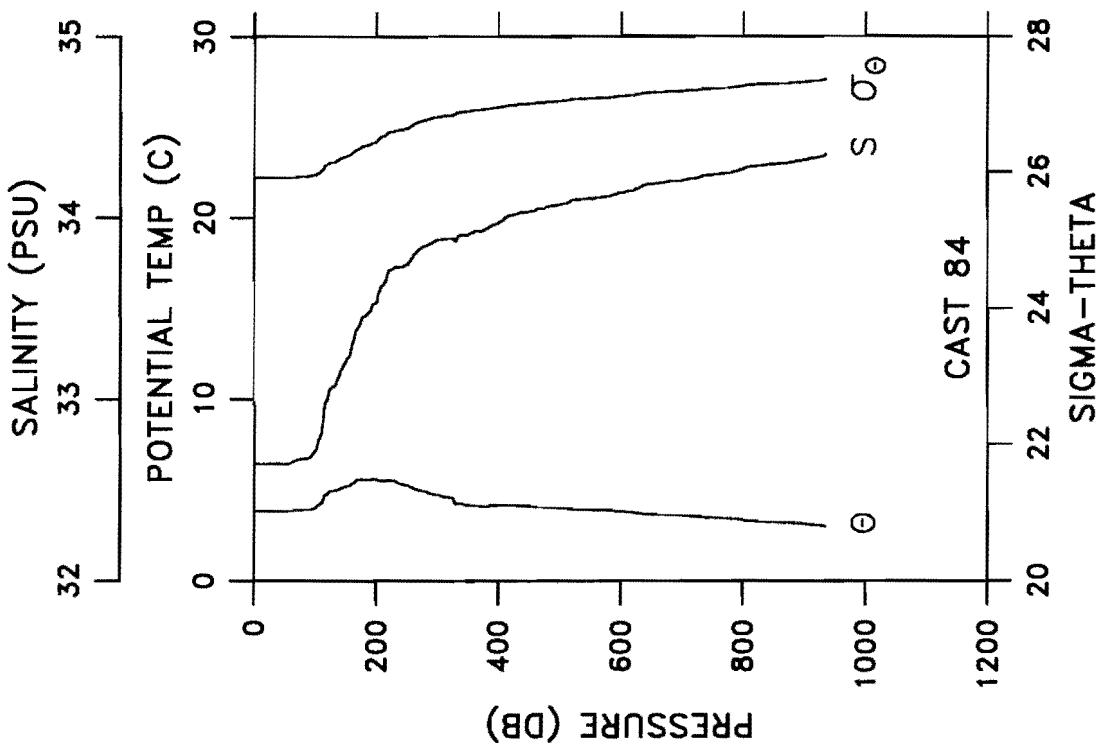
CAST CG2-91-DI -083 DATE 31 MAR 91 TIME 2122 GMT
 LAT 56 01.6N LONG 153 02.7W WEATHER 7 SEA STATE 3
 BAROMETER 101 WIND DIR 140 T SPD 28 KT VISIBILITY 7
 CLOUD 6 AMOUNT 8 DRY 02.5 WET 00.6 DEPTH 1977 M



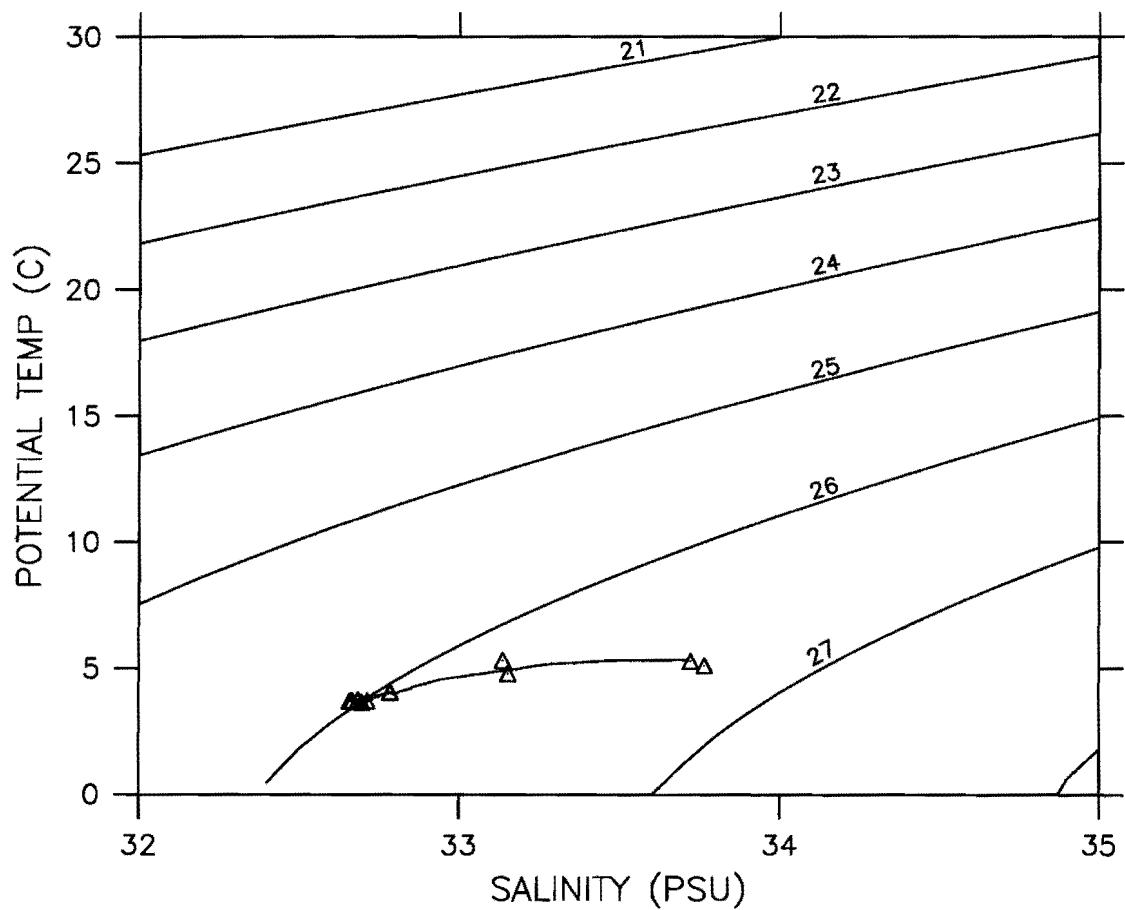
CAST CG2-91-DI -084 DATE 01 APR 91 TIME 0100 GMT
LAT 56 14.5N LONG 153 10.8W



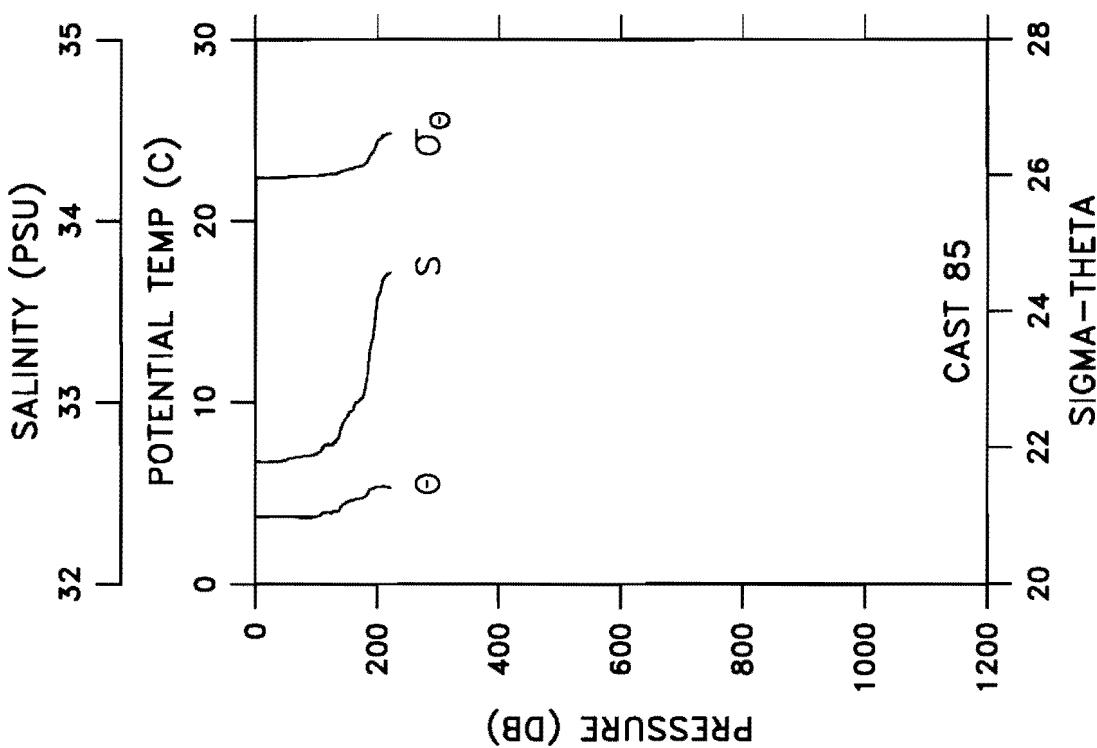
CAST CG2-91-DI -084 DATE 01 APR 91 TIME 0100 GMT
 LAT 56 14.5N LONG 153 10.8W WEATHER 2 SEA STATE 4
 BAROMETER 98 WIND DIR 105 T SPD 24 KT VISIBILITY 8
 CLOUD 4 AMOUNT 8 DRY 02.4 WET 00.8 DEPTH 0964 M



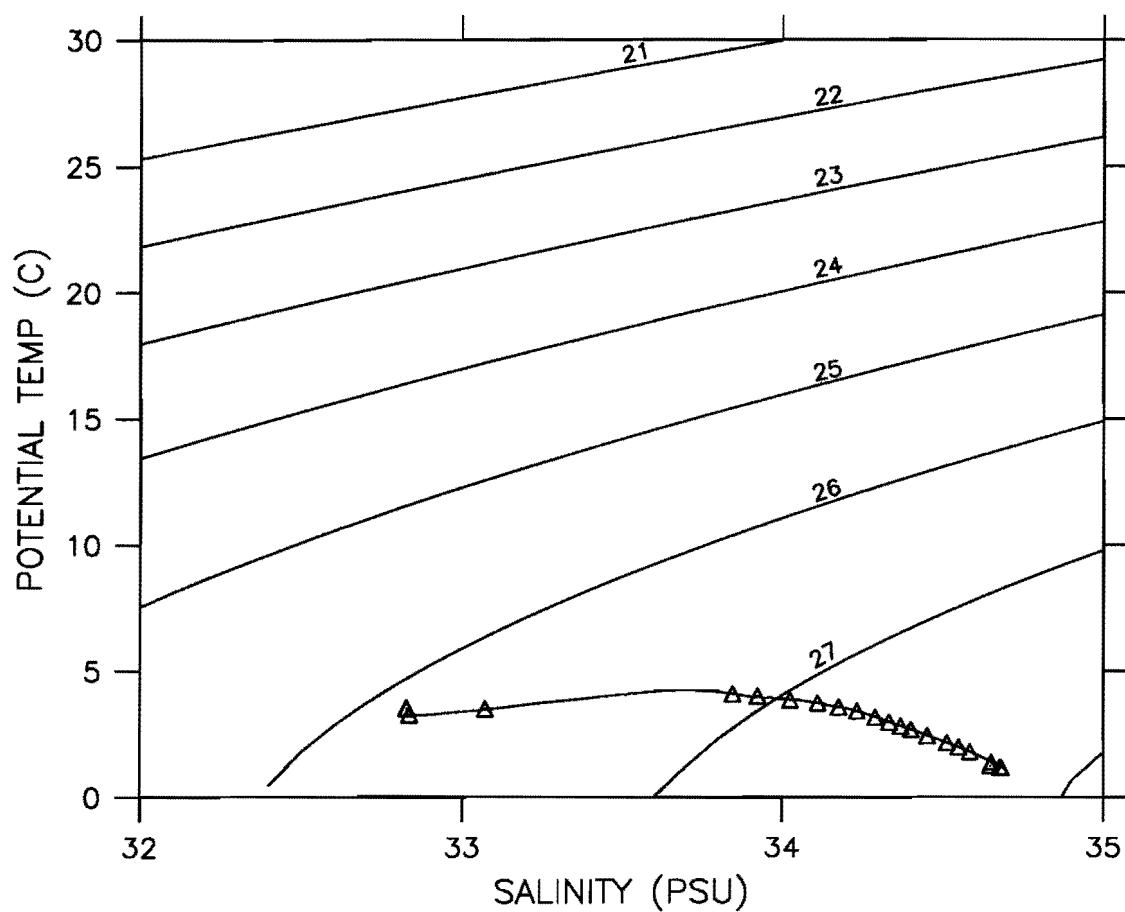
CAST CG2-91-DI -085 DATE 01 APR 91 TIME 0400 GMT
LAT 56 17.7N LONG 153 13.9W



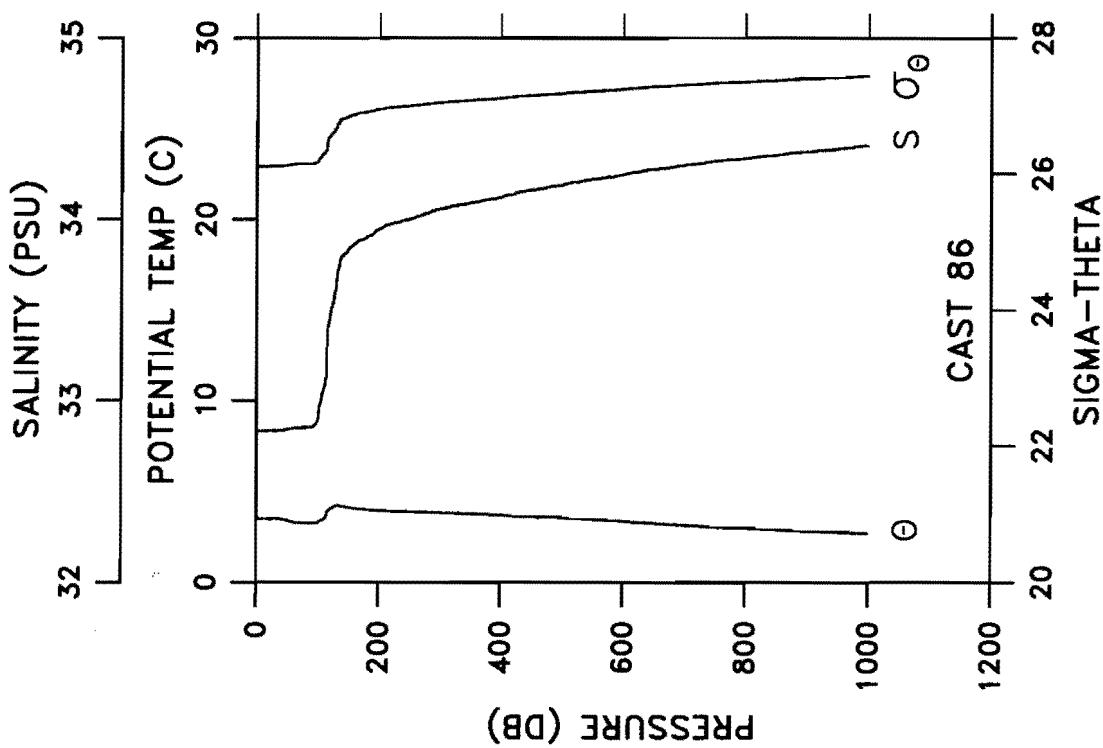
CAST CG2-91-DI -085 DATE 01 APR 91 TIME 0400 GMT
 LAT 56 17.N LONG 153 13.W WEATHER SEA STATE
 BAROMETER WIND DIR T SPD KT VISIBILITY
 CLOUD AMOUNT DRY WET DEPTH 0272 M



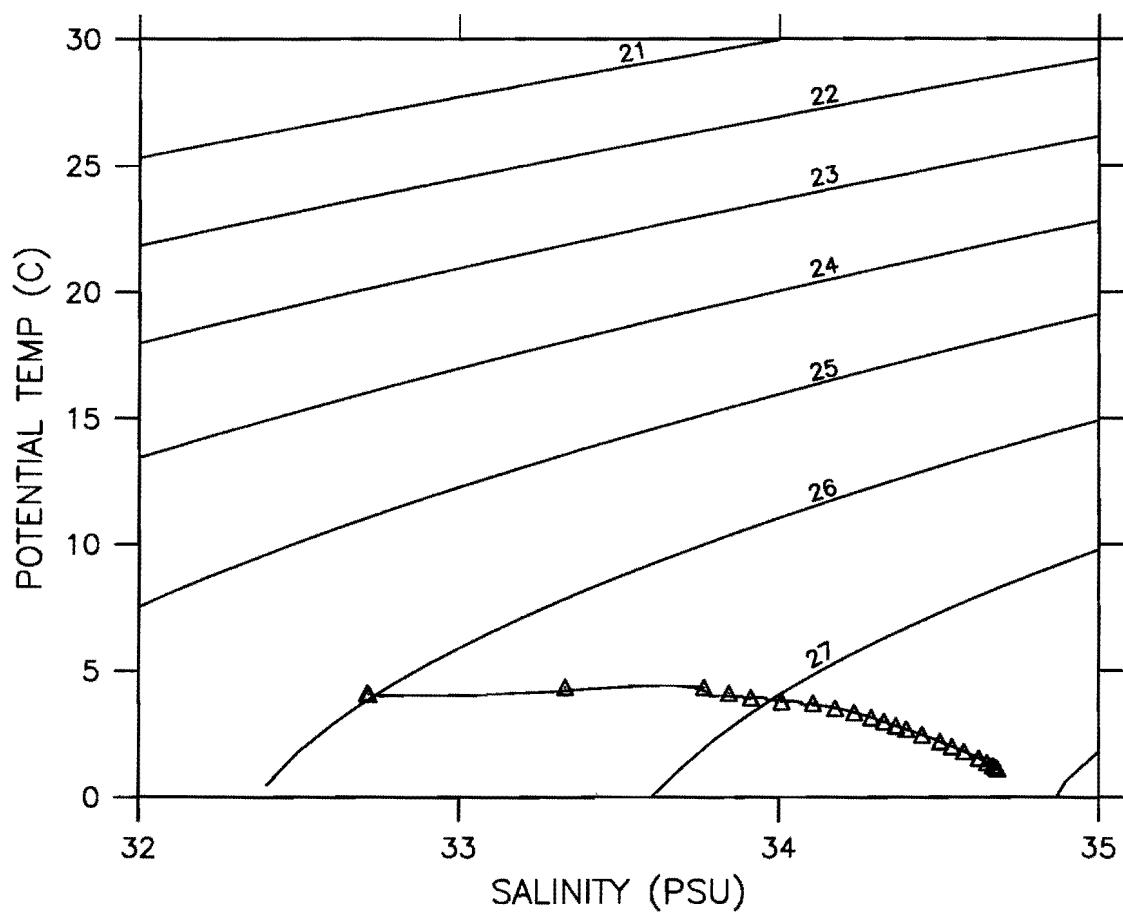
CAST CG2-91-DI -086 DATE 01 APR 91 TIME 2021 GMT
LAT 55 04.2N LONG 152 17.9W



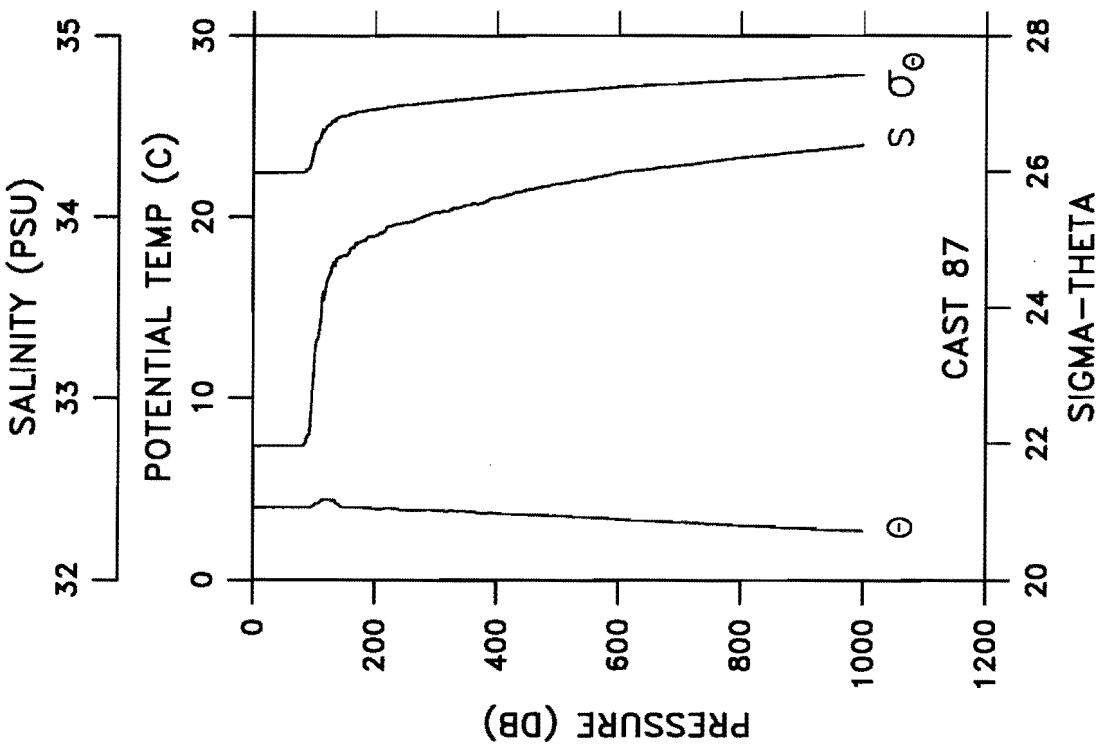
CAST CG2-91-DI -086		DATE 01 APR 91	TIME 2021 GMT	WEATHER 5	SEA STATE 5			
LAT 55 04.2N LONG 152 17.9W								
BAROMETER 88		WIND DIR 045 T	SPD 16 KT	VISIBILITY 7				
CLOUD 5 AMOUNT 8		DRY 03.6	WET 02.4	DEPTH 4157 M				
PRES (DB)	POT TEMP (C)	SAL (PSU)	SIG-TH	DELTA-D (DYN-M)				
0	3.496	32.832	26.110	0.000				
10	3.496	32.832	26.110	0.019				
20	3.491	32.833	26.112	0.058				
30	3.492	32.833	26.112	0.057				
40	3.478	32.835	26.114	0.076				
50	3.402	32.843	26.128	0.095				
60	3.319	32.849	26.140	0.113				
70	3.280	32.848	26.142	0.132				
80	3.261	32.850	26.146	0.151				
90	3.257	32.853	26.148	0.169				
100	3.262	32.882	26.171	0.188				
110	3.463	33.070	26.303	0.205				
120	4.002	33.456	26.558	0.221				
130	4.204	33.624	26.671	0.236				
140	4.181	33.796	26.810	0.249				
150	4.120	33.834	26.847	0.261				
160	4.059	33.864	26.877	0.273				
170	4.019	33.884	26.897	0.284				
180	3.986	33.904	26.916	0.296				
190	3.971	33.920	26.930	0.307				
200	3.945	33.946	26.953	0.319				
250	3.881	34.000	27.003	0.373				
300	3.842	34.056	27.051	0.425				
350	3.769	34.090	27.086	0.476				
400	3.714	34.119	27.114	0.525				
450	3.607	34.159	27.157	0.572				
500	3.551	34.187	27.185	0.619				
550	3.463	34.220	27.219	0.664				
600	3.364	34.245	27.249	0.707				
650	3.246	34.274	27.283	0.749				
700	3.152	34.296	27.309	0.790				
750	3.042	34.321	27.339	0.830				
800	2.976	34.335	27.357	0.869				
900	2.824	34.372	27.399	0.943				
1000	2.681	34.404	27.438	1.015				
1500	2.113	34.526	27.583	1.331				
2000	1.795	34.588	27.657	1.602				
2500	1.535	34.630	27.710	1.850				
3000	1.367	34.655	27.743	2.083				
3500	1.243	34.671	27.765	2.310				
4000	1.177	34.681	27.777	2.535				
4174	1.165	34.681	27.778					



CAST CG2-91-DI -087 DATE 02 APR 91 TIME 2205 GMT
LAT 52 30.0N LONG 152 01.2W



CAST CG2-91-DI -087 DATE 02 APR 91 TIME 2205 GMT
 LAT 52 30.0N LONG 152 01.2W WEATHER 7 SEA STATE 6
 BAROMETER 62 WIND DIR 140 T SPD 26 KT VISIBILITY 7
 CLOUD 7 AMOUNT 8 DRY 04.5 WET 03.5 DEPTH 4403 M



HYDROGRAPHIC DATA

CAST CG1-91-DI -001 LAT 48 50.0N LONG 127 39.7W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
2198.	1.812	34.609	0.00	1.662	27.684	
2194.	1.812	34.610	0.00	1.662	27.685	
2195.	1.813	34.613	0.00	1.663	27.688	
2196.	1.814	34.614	0.00	1.664	27.688	
2199.	1.811	34.612	0.00	1.661	27.687	
2212.	1.809	34.612	0.00	1.658	27.687	
2225.	1.804	34.615	0.00	1.652	27.690	
2233.	1.803	34.616	0.00	1.650	27.691	
2238.	1.802	34.617	0.00	1.649	27.692	
2261.	1.800	34.618	0.00	1.645	27.693	
2272.	1.798	34.618	0.00	1.642	27.693	
2279.	1.797	34.615	0.00	1.640	27.691	
2284.	1.796	34.619	0.00	1.639	27.694	
2288.	1.794	34.616	0.00	1.636	27.694	
2296.	1.794	34.616	0.00	1.636	27.692	
2303.	1.791	34.620	0.00	1.632	27.696	
2311.	1.789	34.619	0.00	1.629	27.695	
2319.	1.784	34.621	0.00	1.624	27.697	
2322.	1.785	34.621	0.00	1.625	27.697	
2332.	1.785	34.620	0.00	1.624	27.696	
2347.	1.780	34.622	0.00	1.618	27.698	
2354.	1.776	34.622	0.00	1.613	27.699	
2381.	1.773	34.626	0.00	1.608	27.702	

CAST CG1-91-DI -002 LAT 50 00.2N LONG 135 00.0W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
2198.	1.812	34.609	0.00	1.662	27.684	
2194.	1.812	34.610	0.00	1.662	27.685	
2195.	1.813	34.613	0.00	1.663	27.688	
2196.	1.814	34.614	0.00	1.664	27.688	
2199.	1.811	34.612	0.00	1.661	27.687	
2212.	1.809	34.612	0.00	1.658	27.687	
2225.	1.804	34.615	0.00	1.652	27.690	
2233.	1.803	34.616	0.00	1.650	27.691	
2238.	1.802	34.617	0.00	1.649	27.692	
2261.	1.800	34.618	0.00	1.645	27.693	
2272.	1.798	34.618	0.00	1.642	27.693	
2279.	1.797	34.615	0.00	1.640	27.691	
2284.	1.796	34.619	0.00	1.639	27.694	
2288.	1.794	34.616	0.00	1.636	27.694	
2296.	1.794	34.616	0.00	1.636	27.692	
2303.	1.791	34.620	0.00	1.632	27.696	
2311.	1.789	34.619	0.00	1.629	27.695	
2319.	1.784	34.621	0.00	1.624	27.697	
2322.	1.785	34.621	0.00	1.625	27.697	
2332.	1.785	34.620	0.00	1.624	27.696	
2347.	1.780	34.622	0.00	1.618	27.698	
2354.	1.776	34.622	0.00	1.613	27.699	
2381.	1.773	34.626	0.00	1.608	27.702	

CAST CG1-91-DI -002 LAT 50 00.2N LONG 135 00.0W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
5.	6.825	32.496	0.00	6.825	25.470	
17.	6.830	32.496	0.00	6.829	25.470	
36.	6.821	32.500	0.00	6.818	25.474	
54.	6.846	32.515	0.00	6.841	25.483	
75.	6.788	32.523	0.00	6.781	25.497	
97.	6.722	32.535	0.00	6.714	25.515	
122.	5.853	33.388	0.00	5.843	26.298	
146.	6.028	33.723	0.00	6.016	26.542	
171.	5.900	33.800	0.00	5.886	26.619	
198.	5.751	33.862	0.00	5.735	26.686	
244.	5.342	33.896	0.00	5.323	26.763	
297.	5.103	33.927	0.00	5.080	26.816	

CAST CG1-91-DI -003 LAT 50 00.2N LONG 134 59.5W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
2198.	1.812	34.609	0.00	1.662	27.684	
2194.	1.812	34.610	0.00	1.662	27.685	
2195.	1.813	34.613	0.00	1.663	27.688	
2196.	1.814	34.614	0.00	1.664	27.688	
2199.	1.811	34.612	0.00	1.661	27.687	
2212.	1.809	34.612	0.00	1.658	27.687	
2225.	1.804	34.615	0.00	1.652	27.690	
2233.	1.803	34.616	0.00	1.650	27.691	
2238.	1.802	34.617	0.00	1.649	27.692	
2261.	1.800	34.618	0.00	1.645	27.693	
2272.	1.798	34.618	0.00	1.642	27.693	
2279.	1.797	34.615	0.00	1.640	27.691	
2284.	1.796	34.619	0.00	1.639	27.694	
2288.	1.794	34.616	0.00	1.636	27.694	
2296.	1.794	34.616	0.00	1.636	27.692	
2303.	1.791	34.620	0.00	1.632	27.696	
2311.	1.789	34.619	0.00	1.629	27.695	
2319.	1.784	34.621	0.00	1.624	27.697	
2322.	1.785	34.621	0.00	1.625	27.697	
2332.	1.785	34.620	0.00	1.624	27.696	
2347.	1.780	34.622	0.00	1.618	27.698	
2354.	1.776	34.622	0.00	1.613	27.699	
2381.	1.773	34.626	0.00	1.608	27.702	

CAST CG1-91-DI -005 LAT 47 59.5N LONG 134 58.7W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
344.	4.808	33.901	0.00	4.782	26.829
393.	4.609	33.943	0.00	4.580	26.884
444.	4.360	34.001	0.00	4.327	26.957
493.	4.181	34.047	0.00	4.145	27.013
592.	3.881	34.133	0.00	3.839	27.113
692.	3.669	34.194	0.00	3.620	27.183
792.	3.451	34.250	0.00	3.396	27.250
892.	3.247	34.302	0.00	3.186	27.311
992.	3.096	34.337	0.00	3.028	27.353
1093.	2.951	34.373	0.00	2.877	27.396
1293.	2.633	34.441	0.00	2.546	27.479
1594.	2.288	34.513	0.00	2.181	27.567
1890.	2.019	34.573	0.00	1.892	27.638
2095.	1.882	34.600	0.00	1.739	27.671
2295.	1.800	34.617	0.00	1.642	27.692
2497.	1.731	34.633	0.00	1.556	27.712
2797.	1.654	34.642	0.00	1.453	27.726
3096.	1.599	34.654	0.00	1.371	27.742
3397.	1.551	34.663	0.00	1.294	27.754
3400.	1.549	34.664	0.00	1.292	27.755
3396.	1.549	34.663	0.00	1.292	27.755
3497.	1.543	34.666	0.00	1.276	27.758
3602.	1.538	34.669	0.00	1.260	27.762
3787.	1.545	34.671	0.00	1.248	27.764

CAST CG1-91-DI -006 LAT 47 59.5N LONG 134 59.4W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
3.	8.017	32.475	0.00	8.017	25.289
15.	7.997	32.475	0.00	7.996	25.292
36.	7.985	32.476	0.00	7.982	25.295
55.	7.856	32.480	0.00	7.851	25.317
75.	7.773	32.485	0.00	7.766	25.333
94.	7.527	32.505	0.00	7.518	25.383
123.	6.089	33.003	0.00	6.079	25.965
142.	5.761	33.138	0.00	5.750	26.112
173.	5.448	33.553	0.00	5.434	26.478
195.	5.704	33.684	0.00	5.688	26.551
245.	5.520	33.835	0.00	5.500	26.693
296.	5.086	33.857	0.00	5.063	26.762

CAST CG1-91-DI -007 LAT 46 59.2N LONG 134 59.8W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
344.	8.808	33.901	0.00	4.782	26.829
393.	8.609	33.943	0.00	4.580	26.884
444.	8.360	34.001	0.00	4.327	26.957
493.	8.181	34.047	0.00	4.145	27.013
592.	7.881	34.133	0.00	3.839	27.113
692.	7.669	34.194	0.00	3.620	27.183
792.	7.451	34.250	0.00	3.396	27.250
892.	7.247	34.302	0.00	3.186	27.311
992.	7.096	34.337	0.00	3.028	27.353
1093.	6.951	34.373	0.00	2.877	27.396
1293.	6.633	34.441	0.00	2.546	27.479
1594.	6.288	34.513	0.00	2.181	27.567
1890.	6.019	34.573	0.00	1.892	27.638
2095.	5.882	34.600	0.00	1.739	27.671
2295.	5.800	34.617	0.00	1.642	27.692
2497.	5.731	34.633	0.00	1.556	27.712
2797.	5.654	34.642	0.00	1.453	27.726
3096.	5.599	34.654	0.00	1.371	27.742
3397.	5.551	34.663	0.00	1.294	27.754
3400.	5.549	34.664	0.00	1.292	27.755
3396.	5.549	34.663	0.00	1.292	27.755
3497.	5.543	34.666	0.00	1.276	27.758
3602.	5.538	34.669	0.00	1.260	27.762
3787.	5.545	34.671	0.00	1.248	27.764

CAST CG1-91-DI -008 LAT 46 00.2N LONG 135 01.1W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
344.	8.822	32.465	0.00	8.821	25.162
393.	8.823	32.466	0.00	8.821	25.162
444.	8.816	32.466	0.00	8.811	25.164
493.	8.750	32.470	0.00	8.743	25.177
592.	8.392	32.485	0.00	8.383	25.243
692.	6.439	32.985	0.00	6.427	25.907
792.	5.704	33.592	0.00	5.688	26.479
892.	5.778	33.846	0.00	5.758	26.671
992.	5.212	33.849	0.00	5.189	26.741
1093.	3.46.	34.244	0.00	3.402	27.244
1293.	3.227	34.300	0.00	3.166	27.311
1594.	3.049	34.043	0.00	2.981	27.367
1890.	2.400	34.501	0.00	2.300	27.548
2095.	2.010	34.576	0.00	1.883	27.641
2295.	1.888	34.600	0.00	1.745	27.671
2497.	1.805	34.616	0.00	1.647	27.691
2797.	1.736	34.628	0.00	1.561	27.707
3096.	1.605	34.652	0.00	1.386	27.739
3397.	1.533	34.667	0.00	1.266	27.760

CAST CG1-91-DI -008 LAT 46 00.2N LONG 135 01.1W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
344.	5.322	33.900	0.00	5.295	26.769
393.	5.070	33.953	0.00	5.039	26.841
444.	4.721	33.981	0.00	4.687	26.903
493.	4.434	34.014	0.00	4.397	26.960
592.	4.109	34.102	0.00	4.066	27.065
692.	3.878	34.172	0.00	3.828	27.145
792.	3.598	34.232	0.00	3.542	27.221
892.	3.355	34.290	0.00	3.293	27.291
992.	3.165	34.335	0.00	3.097	27.345
1095.	2.990	34.381	0.00	2.915	27.399
1291.	2.670	34.448	0.00	2.583	27.481
142.	2.253	34.527	0.00	2.146	27.581
173.	2.006	34.575	0.00	1.879	27.641
195.	1.898	34.598	0.00	1.755	27.669
2494.	1.808	34.617	0.00	1.650	27.692
2800.	1.645	34.645	0.00	1.444	27.729
3104.	1.581	34.656	0.00	1.352	27.745
3396.	1.547	34.665	0.00	1.290	27.756
3395.	1.547	34.665	0.00	1.290	27.756
3397.	1.547	34.661	0.00	1.290	27.753
3703.	1.537	34.671	0.00	1.249	27.764
3700.	1.538	34.671	0.00	1.250	27.764
3952.	1.547	34.671	0.00	1.232	27.765

CAST	CG1-91-DI	-009	LAT	46 00 .0N	LONG	134 59 .9W	PRES	TEMP	SAL	OXY	POT	TEMP	SIG-TH
	(DB)	(C)	(PSU)	(ML/L)	(C)	(C)	(DB)	(C)	(PSU)	(ML/L)	(C)	(C)	
1.	9.941	32.514	0.00	9.941	25.021		8.	11.455	32.719	0.00	11.454	24.919	
15.	9.935	32.512	0.00	9.933	25.021		23.	11.456	32.718	0.00	11.453	24.918	
36.	9.935	32.513	0.00	9.931	0.022		41.	11.447	32.719	0.00	11.442	24.921	
56.	9.893	32.510	0.00	9.887	25.027		58.	11.437	32.719	0.00	11.430	24.923	
76.	9.473	32.529	0.00	9.465	25.111		74.	11.262	32.719	0.00	11.253	24.955	
94.	8.524	32.690	0.00	8.515	25.384		94.	11.211	32.719	0.00	11.200	24.965	
119.	7.344	32.962	0.00	7.333	25.768		119.	10.895	32.734	0.00	10.881	25.033	
146.	6.807	33.173	0.00	6.794	26.008		143.	8.572	32.800	0.00	8.557	25.464	
168.	6.605	33.394	0.00	6.590	26.209		168.	7.644	32.993	0.00	7.628	25.752	
189.	6.304	33.621	0.00	6.288	26.427		193.	6.701	33.277	0.00	6.684	26.104	
243.	6.269	33.843	0.00	6.248	26.607		245.	6.502	33.677	0.00	6.480	26.446	
294.	5.739	33.876	0.00	5.715	26.700		296.	6.328	33.848	0.00	6.302	26.604	
393.	5.101	33.943	0.00	5.070	26.829								
492.	4.471	34.006	0.00	4.434	26.950								
595.	4.142	34.099	0.00	4.099	27.059								
692.	3.905	34.164	0.00	3.855	27.136								
758.	3.712	34.213	0.00	3.658	27.195								
966.	3.259	34.312	0.00	3.192	27.318								

CAST	CG1-91-DI	-010	LAT	45 00 .3N	LONG	135 00 .2W	PRES	TEMP	SAL	OXY	POT	TEMP	SIG-TH
	(DB)	(C)	(PSU)	(ML/L)	(C)	(C)	(DB)	(C)	(PSU)	(ML/L)	(C)	(C)	
5.	10.649	32.613	0.00	10.648	24.979		351.	5.851	33.874	0.00	5.821	26.685	
19.	10.640	32.610	0.00	10.638	24.979		402.	5.440	33.886	0.00	5.407	26.745	
47.	10.552	32.596	0.00	10.547	24.983		450.	5.091	33.920	0.00	5.055	26.813	
71.	9.388	32.499	0.00	9.380	25.101		498.	4.801	33.956	0.00	4.763	26.874	
94.	8.682	32.593	0.00	8.672	25.284		599.	4.314	34.056	0.00	4.269	27.007	
144.	7.171	33.208	0.00	7.158	25.986		698.	3.960	34.136	0.00	3.909	27.108	
193.	6.547	33.636	0.00	6.530	26.407		799.	3.738	34.236	0.00	3.681	27.211	
243.	6.568	33.863	0.00	6.546	26.584		900.	3.627	34.327	0.00	3.562	27.295	
294.	5.949	33.895	0.00	5.924	26.689		1000.	3.341	34.366	0.00	3.271	27.354	
393.	5.096	33.918	0.00	5.065	26.810		1101.	3.205	34.396	0.00	3.128	27.391	
492.	4.496	34.001	0.00	4.459	26.943		1301.	2.818	34.464	0.00	2.729	27.482	
594.	4.123	34.078	0.00	4.080	27.045		1602.	2.343	34.532	0.00	2.235	27.578	
693.	3.855	34.167	0.00	3.805	27.143		1899.	2.030	34.582	0.00	1.902	27.645	
791.	3.638	34.229	0.00	3.582	27.215		2098.	1.904	34.605	0.00	1.761	27.674	
893.	3.399	34.292	0.00	3.337	27.289		2297.	1.825	34.619	0.00	1.666	27.692	
992.	3.260	34.343	0.00	3.191	27.343		1301.	1.746	34.631	0.00	1.571	27.709	
1493.	2.467	34.510	0.00	2.366	27.549		1602.	1.654	34.647	0.00	1.452	27.730	
1892.	2.016	34.580	0.00	1.888	27.644		3103.	1.577	34.659	0.00	1.349	27.747	
2092.	1.885	34.605	0.00	1.743	27.675		3404.	1.545	34.666	0.00	1.288	27.757	
2294.	1.806	34.620	0.00	1.648	27.694		3401.	1.544	34.667	0.00	1.287	27.758	
2494.	1.739	34.632	0.00	1.564	27.710		3404.	1.545	34.668	0.00	1.288	27.759	
3001.	1.583	34.655	0.00	1.364	27.743		3706.	1.539	34.674	0.00	1.250	27.766	
3496.	1.548	34.663	0.00	1.281	27.755		3706.	1.540	34.673	0.00	1.252	27.765	
4043.	1.542	34.676	0.00	1.217	27.770		3973.	1.551	34.674	0.00	1.234	27.768	

CAST CG1-91-DI -013 LAT 41 59.9N LONG 134 59.5W							CAST CG1-91-DI -015 LAT 40 00.0N LONG 135 00.0W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	POT TEMP	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	12.533	32.863	0.00	12.532	24.829	9.	13.681	32.837	0.00	13.680	24.582		
24.	12.446	32.867	0.00	12.443	24.850	24.	13.625	32.836	0.00	13.622	24.593		
41.	12.427	32.867	0.00	12.422	24.854	43.	13.587	32.836	0.00	13.581	24.602		
62.	12.362	32.866	0.00	12.354	24.866	63.	13.453	32.840	0.00	13.444	24.632		
82.	11.982	32.871	0.00	11.972	24.942	84.	13.438	32.896	0.00	13.427	24.679		
102.	10.177	32.937	0.00	10.165	25.314	104.	12.350	32.975	0.00	12.337	24.954		
127.	8.574	33.136	0.00	8.561	25.727	128.	9.447	32.789	0.00	9.433	25.319		
151.	7.960	33.338	0.00	7.945	25.977	153.	8.743	32.918	0.00	8.727	25.531		
177.	7.128	33.489	0.00	7.112	26.214	177.	8.224	33.110	0.00	8.206	25.760		
199.	6.957	33.581	0.00	6.939	26.310	204.	7.899	33.578	0.00	7.879	26.175		
250.	6.971	33.869	0.00	6.948	26.535	253.	7.643	33.878	0.00	7.618	26.449		
303.	6.467	33.911	0.00	6.440	26.636	304.	6.830	33.938	0.00	6.802	26.609		
						353.	6.376	33.933	0.00	6.345	26.666		
						401.	5.833	33.939	0.00	5.799	26.739		
						452.	5.237	33.962	0.00	5.201	26.829		
						501.	4.896	33.999	0.00	4.857	26.898		
						601.	4.508	34.087	0.00	4.462	27.011		
						704.	4.197	34.193	0.00	4.145	27.129		
CAST CG1-91-DI -014 LAT 42 00.3N LONG 134 59.7W							CAST CG1-91-DI -016 LAT 39 59.8N LONG 134 59.9W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	POT TEMP	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
350.	6.256	33.911	0.00	6.225	26.664		801.	4.010	34.256	0.00	3.951	27.199	
406.	5.566	32.995	0.00	5.533	26.025		900.	3.747	34.329	0.00	3.682	27.285	
456.	5.171	33.947	0.00	5.135	26.825		1014.	3.507	34.383	0.00	3.434	27.352	
502.	4.797	33.988	0.00	4.758	26.900		1104.	3.277	34.426	0.00	3.199	27.409	
605.	4.287	34.096	0.00	4.242	27.042		1298.	2.866	34.476	0.00	2.776	27.487	
702.	3.866	34.185	0.00	3.816	27.157		1601.	2.330	34.552	0.00	2.222	27.595	
804.	3.690	34.249	0.00	3.633	27.226		1903.	1.990	34.598	0.00	1.862	27.660	
900.	3.453	34.331	0.00	3.390	27.315		2105.	1.867	34.616	0.00	1.724	27.685	
1000.	3.304	34.368	0.00	3.234	27.359		2306.	1.796	34.626	0.00	1.637	27.700	
1101.	3.116	34.411	0.00	3.040	27.411		2502.	1.710	34.638	0.00	1.535	27.717	
1300.	2.785	34.470	0.00	2.696	27.489		2802.	1.627	34.651	0.00	1.426	27.735	
1599.	2.317	34.538	0.00	2.209	27.585		3104.	1.585	34.663	0.00	1.356	27.750	
1900.	2.026	34.590	0.00	1.898	27.651		3407.	1.549	34.666	0.00	1.291	27.757	
2102.	1.871	34.614	0.00	1.728	27.684		3404.	1.550	34.667	0.00	1.292	27.758	
2299.	1.799	34.627	0.00	1.640	27.701		3407.	1.549	34.666	0.00	1.291	27.757	
2503.	1.717	34.637	0.00	1.542	27.716		3709.	1.525	34.674	0.00	1.237	27.767	
2801.	1.626	34.651	0.00	1.425	27.736		4009.	1.541	34.677	0.00	1.220	27.771	
3103.	1.579	34.659	0.00	1.351	27.747		4148.	1.555	34.676	0.00	1.218	27.770	
3405.	1.554	34.666	0.00	1.296	27.757								
3402.	1.554	34.666	0.00	1.297	27.757								
3402.	1.554	34.666	0.00	1.297	27.757								
3707.	1.552	34.671	0.00	1.263	27.763								
3706.	1.551	34.670	0.00	1.262	27.762								
4072.	1.567	34.675	0.00	1.238	27.768								

CAST	CG1-91-DI	-017	LAT	36 59.5N	LONG	134 59.4W	
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	POT TEMP	SIG-TH	
8.	14.957	33.376	0.00	14.956	24.730	8.	16.227
8.	14.958	33.376	0.00	14.957	24.730	8.	16.216
22.	14.962	33.376	0.00	14.959	24.730	22.	16.246
41.	14.949	33.384	0.00	14.943	24.739	41.	16.326
62.	14.871	33.407	0.00	14.862	24.775	61.	16.314
81.	14.860	33.429	0.00	14.848	24.795	82.	16.486
101.	14.620	33.442	0.00	14.605	24.857	102.	15.996
127.	13.240	33.408	0.00	13.223	25.116	127.	14.615
151.	10.536	33.141	0.00	10.518	25.413	151.	13.467
176.	9.022	33.233	0.00	9.003	25.734	177.	10.889
202.	8.087	33.358	0.00	8.067	25.975	202.	10.143
251.	7.862	33.802	0.00	7.837	26.357	251.	8.693
304.	7.400	33.956	0.00	7.371	26.545	301.	8.329

CAST	CG1-91-DI	-019	LAT	35 00.1N	LONG	135 00.1W	
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	POT TEMP	SIG-TH	
8.	16.227	33.835	0.00	16.226	24.801	8.	16.215
8.	16.216	33.831	0.00	16.200	24.804	8.	16.243
22.	16.246	33.844	0.00	16.319	24.801	22.	16.326
41.	16.326	33.863	0.00	16.304	24.822	41.	16.314
61.	16.314	33.886	0.00	16.473	24.859	61.	16.486
82.	16.473	33.984	0.00	15.980	24.923	82.	16.486
102.	15.996	33.921	0.00	14.596	25.088	102.	15.996
127.	14.615	33.739	0.00	13.446	25.291	127.	14.615
151.	13.467	33.692	0.00	10.868	25.576	151.	13.467
177.	10.889	33.429	0.00	10.120	25.797	177.	10.889
202.	10.143	33.546	0.00	8.667	26.197	202.	10.143
251.	8.693	33.757	0.00	8.298	26.429	251.	8.693
301.	8.329	33.981	0.00	7.459	26.553	301.	8.329
350.	7.493	33.982	0.00	6.662	26.651	350.	7.493
401.	6.699	33.967	0.00	6.034	26.729	401.	6.699
451.	6.073	33.963	0.00	5.518	26.805	451.	6.073
499.	5.559	33.979	0.00	4.782	26.959	499.	5.559
600.	4.829	34.065	0.00	4.319	27.078	600.	4.829
691.	4.371	34.152	0.00	4.319	27.078	691.	4.371

CAST	CG1-91-DI	-020	LAT	35 00.1N	LONG	135 00.1W	
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	POT TEMP	SIG-TH	
801.	4.106	34.228	0.00	4.046	27.167	801.	4.106
902.	3.850	34.314	0.00	3.784	27.263	902.	3.850
1003.	3.631	34.394	0.00	3.558	27.349	1003.	3.631
1104.	3.382	34.436	0.00	3.303	27.407	1104.	3.382
1302.	3.019	34.497	0.00	2.927	27.490	1302.	3.019
1602.	2.529	34.549	0.00	2.418	27.576	1602.	2.529
1902.	2.105	34.592	0.00	1.975	27.647	1902.	2.105
2104.	1.919	34.614	0.00	1.775	27.680	2104.	1.919
2303.	1.806	34.629	0.00	1.647	27.702	2303.	1.806
2506.	1.723	34.641	0.00	1.547	27.719	2506.	1.723
2805.	1.627	34.657	0.00	1.426	27.740	2805.	1.627
3104.	1.565	34.663	0.00	1.337	27.751	3104.	1.565
3404.	1.511	34.670	0.00	1.254	27.763	3404.	1.511
3807.	1.480	34.679	0.00	1.182	27.775	3807.	1.480
4209.	1.490	34.683	0.00	1.148	27.781	4209.	1.490
4606.	1.518	34.685	0.00	1.130	27.783	4606.	1.518
5010.	1.556	34.686	0.00	1.119	27.785	5010.	1.556
5278.	1.588	34.687	0.00	1.116	27.786	5278.	1.588

CAST CG1-91-DI -021 LAT 21 20.0N LONG 152 49.6W

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
8.	23.798	34.935	0.00	23.796	23.654
22.	23.792	34.936	0.00	23.787	23.657
42.	23.788	34.935	0.00	23.779	23.659
81.	23.563	35.080	0.00	23.546	23.837
80.	23.541	35.081	0.00	23.524	23.844
101.	22.916	35.109	0.00	22.895	24.048
125.	22.036	35.167	0.00	22.011	24.343
153.	20.649	35.202	0.00	20.620	24.752
177.	19.478	35.128	0.00	19.446	25.006
203.	17.846	34.923	0.00	17.811	25.260
251.	14.663	34.517	0.00	14.626	25.682
300.	11.526	34.220	0.00	11.488	26.080
350.	9.980	34.143	0.00	9.940	26.293

CAST CG1-91-DI -023 LAT 20 55.1N LONG 153 47.5W

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
8.	23.798	34.935	0.00	23.796	23.654
22.	23.792	34.936	0.00	23.787	23.657
42.	23.788	34.935	0.00	23.779	23.659
81.	23.563	35.080	0.00	23.546	23.837
80.	23.541	35.081	0.00	23.524	23.844
101.	22.916	35.109	0.00	22.895	24.048
125.	22.036	35.167	0.00	22.011	24.343
153.	20.649	35.202	0.00	20.620	24.752
177.	19.478	35.128	0.00	19.446	25.006
203.	17.846	34.923	0.00	17.811	25.260
251.	14.663	34.517	0.00	14.626	25.682
300.	11.526	34.220	0.00	11.488	26.080
350.	9.980	34.143	0.00	9.940	26.293
					1996.
					2001.
					2009.
					2008.
					2009.
					2006.
					2002.
					1999.
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					1996.
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					1996.
					1995.
					1995.
					1998.
					1994.

CAST CG1-91-DI -022 LAT 21 20.1N LONG 152 50.6W

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
8.567	34.099	0.00	8.524	26.487	
403.	8.567	34.099	0.00	8.524	
448.	7.797	34.105	0.00	7.752	26.608
503.	6.841	34.151	0.00	6.794	26.778
599.	5.606	34.258	0.00	5.555	27.022
702.	5.207	34.385	0.00	5.149	27.171
802.	4.728	34.442	0.00	4.664	27.271
900.	4.411	34.478	0.00	4.341	27.335
999.	4.086	34.494	0.00	4.010	27.383
1103.	3.903	34.520	0.00	3.819	27.423
1296.	3.427	34.546	0.00	3.332	27.492
1604.	2.723	34.586	0.00	2.610	27.589
1901.	2.289	34.612	0.00	2.157	27.648
2098.	2.063	34.628	0.00	1.917	27.680
2302.	1.910	34.638	0.00	1.749	27.701
2305.	1.908	34.639	0.00	1.747	27.702
2498.	1.776	34.649	0.00	1.600	27.721
2809.	1.652	34.660	0.00	1.450	27.741
3105.	1.563	34.669	0.00	1.335	27.756
3407.	1.502	34.675	0.00	1.245	27.768
3806.	1.463	34.684	0.00	1.166	27.780
4318.	1.454	34.687	0.00	1.101	27.787
4809.	1.465	34.691	0.00	1.055	27.793
5333.	1.511	34.688	0.00	1.035	27.792

CAST CG2-91-DI -024 LAT 19 53.3N LONG 154 55.3W

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
8.	23.572	34.977	0.00	23.570	23.752
21.	23.584	34.977	0.00	23.580	23.749
40.	23.588	34.977	0.00	23.580	23.749
62.	23.582	34.979	0.00	23.569	23.754
80.	23.154	35.131	0.00	23.138	23.995
101.	22.651	35.192	0.00	22.631	24.187
127.	20.804	35.149	0.00	20.780	24.668
155.	19.417	35.109	0.00	19.389	25.006
176.	18.543	35.030	0.00	18.512	25.169
202.	16.543	34.809	0.00	16.510	24.844
248.	14.059	34.414	0.00	14.023	25.730
301.	10.710	34.172	0.00	10.674	26.189
348.	9.172	34.114	0.00	9.134	26.403
450.	6.878	34.128	0.00	6.836	26.754
500.	6.580	34.184	0.00	6.534	26.839
598.	5.850	34.327	0.00	5.798	27.046
698.	5.401	34.422	0.00	5.342	27.177
786.	4.986	34.449	0.00	4.922	27.248
895.	4.584	34.470	0.00	4.513	27.310
921.	4.444	34.490	0.00	4.372	27.341
917.	4.436	34.490	0.00	4.364	27.342
920.	4.432	34.490	0.00	4.360	27.343
917.	4.431	34.492	0.00	4.359	27.344

CAST CG2-91-DI -025 LAT 20 04.0N LONG 154 40.5W

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
9.	23.603	34.970	0.00	23.601	23.738
22.	23.602	34.970	0.00	23.597	23.739
56.	23.459	35.081	0.00	23.447	23.867
74.	22.632	35.187	0.00	22.617	24.187
103.	21.263	35.217	0.00	21.243	24.594
151.	19.104	35.049	0.00	19.077	25.040
202.	16.660	34.769	0.00	16.627	25.426
303.	10.798	34.171	0.00	10.761	26.173
404.	8.421	34.096	0.00	8.379	26.507
498.	6.946	34.189	0.00	6.899	26.794
600.	5.708	34.283	0.00	5.657	27.029
700.	5.234	34.385	0.00	5.176	27.167
793.	5.008	34.452	0.00	4.943	27.247
993.	4.180	34.498	0.00	4.104	27.376
1294.	3.362	34.551	0.00	3.267	27.502
1443.	2.988	34.573	0.00	2.885	27.555
1596.	2.719	34.589	0.00	2.606	27.592
1747.	2.498	34.601	0.00	2.376	27.621
1898.	2.352	34.609	0.00	2.219	27.641
2095.	2.081	34.627	0.00	1.935	27.678
2292.	1.927	34.637	0.00	1.767	27.699
2516.	1.786	34.649	0.00	1.608	27.721

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
7.	23.779	34.915	0.00	23.778	23.644
28.	23.784	34.919	0.00	23.778	23.647
49.	23.453	35.017	0.00	23.443	23.820
75.	23.332	35.055	0.00	23.317	23.885
101.	22.646	35.062	0.00	22.626	24.241
124.	22.063	35.345	0.00	22.038	24.471
203.	16.213	34.686	0.00	16.181	25.466
246.	13.956	34.432	0.00	13.921	25.765
303.	11.155	34.207	0.00	11.117	26.137
349.	9.808	34.130	0.00	9.768	26.312
403.	8.595	34.130	0.00	8.552	26.507
498.	7.078	34.196	0.00	7.031	26.781
600.	5.951	34.281	0.00	5.899	26.997
686.	5.730	34.393	0.00	5.671	27.114
800.	5.054	34.435	0.00	4.988	27.229
899.	4.636	34.466	0.00	4.564	27.301
998.	4.221	34.491	0.00	4.144	27.366

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
1103.	3.904	34.518	0.00	3.820	27.421
1302.	3.443	34.551	0.00	3.347	27.494
1302.	3.443	34.551	0.00	3.347	27.494
1900.	2.278	34.616	0.00	2.146	27.652
2098.	2.054	34.630	0.00	1.908	27.682
2302.	1.910	34.641	0.00	1.749	27.704
2501.	1.809	34.649	0.00	1.632	27.719
2702.	1.725	34.656	0.00	1.531	27.732
2901.	1.663	34.664	0.00	1.452	27.744
3104.	1.582	34.666	0.00	1.353	27.753
3102.	1.581	34.667	0.00	1.353	27.754
3102.	1.582	34.666	0.00	1.354	27.753
3403.	1.519	34.673	0.00	1.262	27.765
3408.	1.519	34.673	0.00	1.262	27.765
3705.	1.475	34.679	0.00	1.188	27.775
3704.	1.476	34.680	0.00	1.189	27.775
3702.	1.477	34.679	0.00	1.191	27.775
4009.	1.463	34.682	0.00	1.144	27.780
4309.	1.468	34.686	0.00	1.116	27.785
4608.	1.477	34.687	0.00	1.090	27.788
4909.	1.484	34.690	0.00	1.061	27.792
5007.	1.487	34.690	0.00	1.052	27.793
5213.	1.486	34.692	0.00	1.026	27.796

CAST CG2-91-DI -028						LAT 20 42.4N LONG 153 46.0W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
34.	23.719	34.939	0.00	23.712	23.682	9.	23.143	35.015	0.00	23.141	23.906
105.	22.999	35.163	0.00	22.978	24.065	23.	23.155	35.013	0.00	23.150	23.902
492.	7.351	34.178	0.00	7.303	26.729	42.	23.162	35.016	0.00	23.153	23.903
997.	4.099	34.487	0.00	4.023	27.376	62.	23.150	35.021	0.00	23.137	23.911
1500.	2.916	34.575	0.00	2.809	27.563	81.	22.516	35.153	0.00	22.500	24.194
2002.	2.151	34.620	0.00	2.012	27.666	103.	21.835	35.281	0.00	21.815	24.485
2502.	1.760	34.649	0.00	1.584	27.722	126.	20.716	35.211	0.00	20.692	24.739
2986.	1.569	34.665	0.00	1.352	27.752	151.	19.539	35.164	0.00	19.511	25.016
3614.	1.462	34.679	0.00	1.185	27.775	177.	18.482	35.079	0.00	18.451	25.222
3614.	1.462	34.679	0.00	1.185	27.775	202.	17.204	34.878	0.00	17.170	25.381
3609.	1.463	34.679	0.00	1.186	27.775	252.	14.550	34.511	0.00	14.513	25.701
3609.	1.462	34.679	0.00	1.186	27.775	309.	11.772	34.206	0.00	11.732	26.023
3607.	1.462	34.678	0.00	1.186	27.774						
3602.	1.463	34.678	0.00	1.187	27.774						
3617.	1.462	34.679	0.00	1.185	27.775						
3604.	1.462	34.684	0.00	1.186	27.779						
4002.	1.443	34.688	0.00	1.125	27.786						
4517.	1.457	34.692	0.00	1.081	27.792						
5079.	1.460	34.692	0.00	1.017	27.797						

CAST CG2-91-DI -029						LAT 21 36.8N LONG 152 26.2W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
7.	22.870	35.055	0.00	22.869	24.015	350.	9.692	34.100	0.00	9.652	26.308
27.	22.871	35.054	0.00	22.865	24.015	401.	8.437	34.073	0.00	8.395	26.487
51.	22.849	35.055	0.00	22.839	24.023	451.	7.274	34.032	0.00	7.231	26.625
67.	22.845	35.055	0.00	22.831	24.025	498.	6.385	34.035	0.00	6.340	26.747
67.	22.845	35.055	0.00	22.831	24.025	498.	6.385	34.035	0.00	6.340	26.747
152.	19.375	35.128	0.00	19.348	25.031	699.	4.847	34.261	0.00	4.791	27.113
201.	17.998	35.019	0.00	17.963	25.297	699.	4.847	34.261	0.00	4.791	27.113
303.	11.215	34.185	0.00	11.177	26.109	900.	4.415	34.464	0.00	4.345	27.323
400.	8.468	34.070	0.00	8.426	26.480	998.	4.083	34.494	0.00	4.007	27.383
502.	6.287	34.031	0.00	6.242	26.756	1096.	3.800	34.519	0.00	3.718	27.432
700.	4.764	34.275	0.00	4.709	27.134	1096.	3.800	34.519	0.00	3.718	27.432
900.	4.211	34.468	0.00	4.142	27.348	1600.	2.658	34.585	0.00	2.546	27.594
1150.	3.558	34.531	0.00	3.474	27.466	1903.	2.200	34.614	0.00	2.069	27.657
1400.	2.994	34.566	0.00	2.894	27.548	2202.	1.938	34.635	0.00	1.785	27.696
1699.	2.457	34.598	0.00	2.339	27.628	2602.	1.705	34.652	0.00	1.521	27.729
2002.	2.100	34.624	0.00	1.962	27.673	3002.	1.542	34.666	0.00	1.324	27.755
2501.	1.757	34.650	0.00	1.581	27.723	3403.	1.477	34.676	0.00	1.221	27.770
2999.	1.558	34.668	0.00	1.340	27.755	3402.	1.478	34.676	0.00	1.222	27.770
3000.	1.558	34.667	0.00	1.340	27.754	3405.	1.476	34.678	0.00	1.220	27.772
3505.	1.466	34.679	0.00	1.200	27.774	3807.	1.450	34.682	0.00	1.153	27.780
4005.	1.442	34.686	0.00	1.124	27.785	4205.	1.451	34.686	0.00	1.111	27.786
4508.	1.443	34.690	0.00	1.069	27.792	4607.	1.456	34.690	0.00	1.070	27.792
5008.	1.466	34.694	0.00	1.032	27.797	5007.	1.477	34.691	0.00	1.043	27.794
5375.	1.500	34.694	0.00	1.019	27.798	5751.	1.556	34.693	0.00	1.025	27.797

CAST CG2-91-DI -032							LAT 22 40.6N LONG 151 59.5W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH		
6.	22.953	34.992	0.00	22.952	23.943	5.	21.070	35.373	0.00	21.069	24.760		
28.	22.958	34.993	0.00	22.952	23.944	22.	21.064	35.081	0.00	21.060	24.541		
49.	22.956	34.991	0.00	22.946	23.944	41.	21.046	35.375	0.00	21.038	24.770		
79.	22.967	34.991	0.00	22.951	23.943	65.	20.944	35.381	0.00	20.932	24.804		
100.	22.829	34.991	0.00	22.809	23.983	81.	20.923	35.377	0.00	20.907	24.808		
147.	19.738	35.135	0.00	19.711	24.942	100.	18.964	35.133	0.00	18.946	25.138		
147.	19.738	35.134	0.00	19.711	24.941	127.	17.895	35.003	0.00	17.873	25.307		
305.	11.594	34.197	0.00	11.555	26.049	152.	17.012	34.865	0.00	16.987	25.415		
399.	8.855	34.077	0.00	8.812	26.425	178.	15.326	34.644	0.00	15.299	25.632		
503.	6.905	34.071	0.00	6.858	26.707	200.	13.856	34.425	0.00	13.827	25.779		
602.	5.663	34.168	0.00	5.612	26.943	252.	11.625	34.218	0.00	11.593	26.059		
701.	5.167	34.274	0.00	5.109	27.087	300.	10.669	34.179	0.00	10.633	26.202		
904.	4.292	34.429	0.00	4.222	27.309	349.	9.539	34.119	0.00	9.500	26.348		
1149.	3.708	34.516	0.00	3.622	27.440	399.	8.441	34.062	0.00	8.399	26.477		
1395.	3.118	34.556	0.00	3.018	27.529	500.	6.580	34.014	0.00	6.534	26.705		
1702.	2.576	34.591	0.00	2.456	27.607	599.	5.381	34.079	0.00	5.332	26.907		
2007.	2.167	34.617	0.00	2.027	27.663	751.	4.487	34.257	0.00	4.429	27.150		
2445.	1.798	34.645	0.00	1.626	27.716	909.	3.909	34.385	0.00	3.842	27.313		
3002.	1.611	34.664	0.00	1.392	27.748								
3507.	1.517	34.676	0.00	1.250	27.768								
4003.	1.478	34.684	0.00	1.159	27.781								
4501.	1.462	34.687	0.00	1.088	27.788								
5009.	1.461	34.693	0.00	1.027	27.797								
5502.	1.509	34.693	0.00	1.012	27.798								

CAST CG2-91-DI -034							LAT 24 00.2N LONG 151 58.0W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH		
6.	22.953	34.992	0.00	22.952	23.943	5.	21.070	35.373	0.00	21.069	24.760		
28.	22.958	34.993	0.00	22.952	23.944	22.	21.064	35.081	0.00	21.060	24.541		
49.	22.956	34.991	0.00	22.946	23.944	41.	21.046	35.375	0.00	21.038	24.770		
79.	22.967	34.991	0.00	22.951	23.943	65.	20.944	35.381	0.00	20.932	24.804		
100.	22.829	34.991	0.00	22.809	23.983	81.	20.923	35.377	0.00	20.907	24.808		
147.	19.738	35.135	0.00	19.711	24.942	100.	18.964	35.133	0.00	18.946	25.138		
147.	19.738	35.134	0.00	19.711	24.941	127.	17.895	35.003	0.00	17.873	25.307		
305.	11.594	34.197	0.00	11.555	26.049	152.	17.012	34.865	0.00	16.987	25.415		
399.	8.855	34.077	0.00	8.812	26.425	178.	15.326	34.644	0.00	15.299	25.632		
503.	6.905	34.071	0.00	6.858	26.707	200.	13.856	34.425	0.00	13.827	25.779		
602.	5.663	34.168	0.00	5.612	26.943	252.	11.625	34.218	0.00	11.593	26.059		
701.	5.167	34.274	0.00	5.109	27.087	300.	10.669	34.179	0.00	10.633	26.202		
904.	4.292	34.429	0.00	4.222	27.309	349.	9.539	34.119	0.00	9.500	26.348		
1149.	3.708	34.516	0.00	3.622	27.440	399.	8.441	34.062	0.00	8.399	26.477		
1395.	3.118	34.556	0.00	3.018	27.529	500.	6.580	34.014	0.00	6.534	26.705		
1702.	2.576	34.591	0.00	2.456	27.607	599.	5.381	34.079	0.00	5.332	26.907		
2007.	2.167	34.617	0.00	2.027	27.663	751.	4.487	34.257	0.00	4.429	27.150		
2445.	1.798	34.645	0.00	1.626	27.716	909.	3.909	34.385	0.00	3.842	27.313		
3002.	1.611	34.664	0.00	1.392	27.748								
3507.	1.517	34.676	0.00	1.250	27.768								
4003.	1.478	34.684	0.00	1.159	27.781								
4501.	1.462	34.687	0.00	1.088	27.788								
5009.	1.461	34.693	0.00	1.027	27.797								
5502.	1.509	34.693	0.00	1.012	27.798								

CAST CG2-91-DI -035							LAT 24 39.9N LONG 152 00.2W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH		
998.	3.693	34.444	0.00	3.620	27.382	10.	21.921	35.204	0.00	21.919	24.397		
1096.	3.478	34.497	0.00	3.399	27.446	27.	21.514	35.328	0.00	21.509	24.605		
1096.	3.478	34.497	0.00	3.399	27.446	54.	21.391	35.333	0.00	21.380	24.645		
1299.	3.043	34.543	0.00	2.951	27.525	77.	21.008	35.332	0.00	20.993	24.750		
1299.	3.043	34.543	0.00	2.044	27.658	101.	20.806	35.342	0.00	20.787	24.814		
1901.	2.175	34.613	0.00	2.044	27.659	155.	17.932	34.982	0.00	17.906	25.283		
1901.	2.175	34.614	0.00	2.044	27.659	155.	17.932	34.982	0.00	17.906	25.283		
2501.	1.737	34.650	0.00	1.561	27.725	301.	10.988	34.148	0.00	10.951	26.121		
2803.	1.623	34.661	0.00	1.422	27.744	398.	8.859	34.071	0.00	8.816	26.420		
3102.	1.552	34.669	0.00	1.324	27.757	500.	6.600	34.007	0.00	6.554	26.697		
3402.	1.504	34.676	0.00	1.248	27.768	600.	5.457	34.069	0.00	5.407	26.890		
3403.	1.504	34.676	0.00	1.248	27.768	698.	4.710	34.185	0.00	4.655	27.068		
3408.	1.470	34.684	0.00	1.247	27.768	898.	4.084	34.483	0.00	4.016	27.373		
3406.	1.504	34.673	0.00	1.247	27.766	1148.	3.438	34.512	0.00	3.355	27.462		
3403.	1.504	34.676	0.00	1.248	27.768	1399.	2.948	34.561	0.00	2.849	27.548		
3705.	1.479	34.681	0.00	1.192	27.766	1701.	2.496	34.591	0.00	2.378	27.613		
4009.	1.470	34.684	0.00	1.151	27.781	2000.	2.105	34.619	0.00	2.067	27.669		
4305.	1.464	34.688	0.00	1.112	27.787	2502.	1.740	34.646	0.00	1.564	27.721		
4606.	1.456	34.690	0.00	1.070	27.792	3004.	1.564	34.666	0.00	1.345	27.753		
4804.	1.458	34.691	0.00	1.049	27.794	3505.	1.500	34.677	0.00	1.233	27.770		
5002.	1.464	34.693	0.00	1.031	27.797	4006.	1.473	34.683	0.00	1.154	27.780		
5211.	1.480	34.692	0.00	1.020	27.797	4510.	1.469	34.688	0.00	1.094	27.788		
5460.	1.505	34.694	0.00	1.013	27.799	5009.	1.469	34.690	0.00	1.035	27.794		
						5344.	1.498	34.694	0.00	1.021	27.798		

CAST CG2-91-DI -036 LAT 25 20.2N LONG 151 59.7W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	21.351	35.340	0.00	21.350	24.658	
27.	21.358	35.340	0.00	21.353	24.658	
55.	21.351	35.349	0.00	21.340	24.668	
79.	20.928	35.378	0.00	20.913	24.807	
103.	20.682	35.366	0.00	20.663	24.865	
153.	18.662	35.087	0.00	18.635	25.181	
209.	15.859	34.618	0.00	15.826	25.494	
291.	11.877	34.210	0.00	11.840	26.006	
398.	8.860	34.080	0.00	8.817	26.427	
502.	6.706	34.022	0.00	6.660	26.695	
593.	5.494	34.065	0.00	5.444	26.882	
707.	4.667	34.200	0.00	4.612	27.085	
897.	4.138	34.391	0.00	4.070	27.295	
1135.	3.447	34.492	0.00	3.365	27.445	
1396.	2.914	34.553	0.00	2.816	27.545	
1697.	2.422	34.589	0.00	2.305	27.618	
2002.	2.045	34.617	0.00	1.908	27.672	
2506.	1.733	34.647	0.00	1.557	27.723	
3005.	1.564	34.667	0.00	1.345	27.754	
3501.	1.492	34.687	0.00	1.226	27.779	
4006.	1.472	34.683	0.00	1.153	27.800	
4505.	1.475	34.688	0.00	1.100	27.788	
5006.	1.476	34.692	0.00	1.042	27.795	
5544.	1.526	34.693	0.00	1.023	27.797	

CAST CG2-91-DI -037 LAT 26 00.1N LONG 151 59.7W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	20.979	35.375	0.00	20.977	24.787	
22.	20.986	35.377	0.00	20.982	24.787	
39.	20.988	35.374	0.00	20.980	24.785	
61.	20.691	35.375	0.00	20.680	24.868	
81.	20.557	35.373	0.00	20.542	24.903	
101.	20.402	35.373	0.00	20.383	24.946	
126.	20.332	35.366	0.00	20.308	24.960	
151.	18.707	35.113	0.00	18.680	25.190	
177.	17.338	34.924	0.00	17.308	25.383	
200.	15.838	34.694	0.00	15.807	25.557	
251.	12.928	34.304	0.00	12.894	25.875	
300.	11.385	34.206	0.00	11.347	26.095	
352.	10.259	34.146	0.00	10.218	26.248	
401.	8.804	34.074	0.00	8.761	26.431	
450.	7.798	34.034	0.00	7.753	26.552	
500.	6.435	34.002	0.00	6.390	26.714	
550.	5.675	34.017	0.00	5.622	26.822	
602.	5.182	34.060	0.00	5.133	26.915	

CAST CG2-91-DI -038 LAT 26 00.2N LONG 151 59.7W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	21.351	35.340	0.00	21.350	24.658	
27.	21.358	35.340	0.00	21.353	24.658	
55.	21.351	35.349	0.00	21.340	24.668	
79.	20.928	35.378	0.00	20.913	24.807	
103.	20.682	35.366	0.00	20.663	24.865	
153.	18.662	35.087	0.00	18.635	25.181	
209.	15.859	34.618	0.00	15.826	25.494	
291.	11.877	34.210	0.00	11.840	26.006	
398.	8.860	34.080	0.00	8.817	26.427	
502.	6.706	34.022	0.00	6.660	26.695	
593.	5.494	34.065	0.00	5.444	26.882	
707.	4.667	34.200	0.00	4.612	27.085	
897.	4.138	34.391	0.00	4.070	27.295	
1135.	3.447	34.492	0.00	3.365	27.445	
1396.	2.914	34.553	0.00	2.816	27.545	
1697.	2.422	34.589	0.00	2.305	27.618	
2002.	2.045	34.617	0.00	1.908	27.672	
2506.	1.733	34.647	0.00	1.557	27.723	
3005.	1.564	34.667	0.00	1.345	27.754	
3501.	1.492	34.687	0.00	1.226	27.779	
4006.	1.472	34.683	0.00	1.153	27.800	
4505.	1.475	34.688	0.00	1.100	27.788	
5006.	1.476	34.692	0.00	1.042	27.795	
5544.	1.526	34.693	0.00	1.023	27.797	

CAST CG2-91-DI -039 LAT 26 39.9N LONG 152 00.0W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	20.979	35.375	0.00	20.977	24.787	
22.	20.986	35.377	0.00	20.982	24.787	
39.	20.988	35.374	0.00	20.980	24.785	
61.	20.691	35.375	0.00	20.680	24.868	
81.	20.557	35.373	0.00	20.542	24.903	
101.	20.402	35.373	0.00	20.383	24.946	
126.	20.332	35.366	0.00	20.308	24.960	
151.	18.707	35.113	0.00	18.680	25.190	
177.	17.338	34.924	0.00	17.308	25.383	
200.	15.838	34.694	0.00	15.807	25.557	
251.	12.928	34.304	0.00	12.894	25.875	
300.	11.385	34.206	0.00	11.347	26.095	
352.	10.259	34.146	0.00	10.218	26.248	
401.	8.804	34.074	0.00	8.761	26.431	
450.	7.798	34.034	0.00	7.753	26.552	
500.	6.435	34.002	0.00	6.390	26.714	
550.	5.675	34.017	0.00	5.622	26.822	
602.	5.182	34.060	0.00	5.133	26.915	

CAST CG2-91-DI -040 LAT 26 39.9N LONG 152 00.0W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	20.979	35.375	0.00	20.977	24.787	
22.	20.986	35.377	0.00	20.982	24.787	
39.	20.988	35.374	0.00	20.980	24.785	
61.	20.691	35.375	0.00	20.680	24.868	
81.	20.557	35.373	0.00	20.542	24.903	
101.	20.402	35.373	0.00	20.383	24.946	
126.	20.332	35.366	0.00	20.308	24.960	
151.	18.707	35.113	0.00	18.680	25.190	
177.	17.338	34.924	0.00	17.308	25.383	
200.	15.838	34.694	0.00	15.807	25.557	
251.	12.928	34.304	0.00	12.894	25.875	
300.	11.385	34.206	0.00	11.347	26.095	
352.	10.259	34.146	0.00	10.218	26.248	
401.	8.804	34.074	0.00	8.761	26.431	
450.	7.798	34.034	0.00	7.753	26.552	
500.	6.435	34.002	0.00	6.390	26.714	
550.	5.675	34.017	0.00	5.622	26.822	
602.	5.182	34.060	0.00	5.133	26.915	

CAST	CG2-91-DI	-040	LAT	27	20.0N	LONG	151	59.9W
PRES (DB)	TEMP (C)		SAL (PSU)	OXY (ML/L)	POT TEMP (C)		SIG-TH	
1150.	3.338	34.481	0.00	3.256	27.447			
1399.	2.856	34.546	0.00	2.758	27.545			
1699.	2.404	34.586	0.00	2.287	27.617			
1999.	2.064	34.614	0.00	1.927	27.668			
2518.	1.686	34.649	0.00	1.510	27.728			
2999.	1.549	34.667	0.00	1.331	27.755			
2999.	1.549	34.667	0.00	1.331	27.755			
5005.	1.500	34.690	0.00	1.065	27.792			
5740.	1.564	34.693	0.00	1.034	27.796			

CAST	CG2-91-DI	-042	LAT	28	20.0N	LONG	151	59.9W
PRES (DB)	TEMP (C)		SAL (PSU)	OXY (ML/L)	POT TEMP (C)		SIG-TH	
1150.	3.338	34.481	0.00	3.256	27.447			
1399.	2.856	34.546	0.00	2.758	27.545			
1699.	2.404	34.586	0.00	2.287	27.617			
1999.	2.064	34.614	0.00	1.927	27.668			
2518.	1.686	34.649	0.00	1.510	27.728			
2999.	1.549	34.667	0.00	1.331	27.755			
2999.	1.549	34.667	0.00	1.331	27.755			
5005.	1.500	34.690	0.00	1.065	27.792			
5740.	1.564	34.693	0.00	1.034	27.796			

CAST	CG2-91-DI	-042	LAT	28	20.0N	LONG	151	59.9W
PRES (DB)	TEMP (C)		SAL (PSU)	OXY (ML/L)	POT TEMP (C)		SIG-TH	
1150.	3.338	34.481	0.00	3.256	27.447			
1399.	2.856	34.546	0.00	2.758	27.545			
1699.	2.404	34.586	0.00	2.287	27.617			
1999.	2.064	34.614	0.00	1.927	27.668			
2518.	1.686	34.649	0.00	1.510	27.728			
2999.	1.549	34.667	0.00	1.331	27.755			
2999.	1.549	34.667	0.00	1.331	27.755			
5005.	1.500	34.690	0.00	1.065	27.792			
5740.	1.564	34.693	0.00	1.034	27.796			

CAST	CG2-91-DI	-043	LAT	28	20.0N	LONG	151	59.9W
PRES (DB)	TEMP (C)		SAL (PSU)	OXY (ML/L)	POT TEMP (C)		SIG-TH	
1150.	3.338	34.481	0.00	3.256	27.447			
1399.	2.856	34.546	0.00	2.758	27.545			
1699.	2.404	34.586	0.00	2.287	27.617			
1999.	2.064	34.614	0.00	1.927	27.668			
2518.	1.686	34.649	0.00	1.510	27.728			
2999.	1.549	34.667	0.00	1.331	27.755			
2999.	1.549	34.667	0.00	1.331	27.755			
5005.	1.500	34.690	0.00	1.065	27.792			
5740.	1.564	34.693	0.00	1.034	27.796			

CAST	CG2-91-DI	-043	LAT	28	20.0N	LONG	151	59.9W
PRES (DB)	TEMP (C)		SAL (PSU)	OXY (ML/L)	POT TEMP (C)		SIG-TH	
1150.	3.338	34.481	0.00	3.256	27.447			
1399.	2.856	34.546	0.00	2.758	27.545			
1699.	2.404	34.586	0.00	2.287	27.617			
1999.	2.064	34.614	0.00	1.927	27.668			
2518.	1.686	34.649	0.00	1.510	27.728			
2999.	1.549	34.667	0.00	1.331	27.755			
2999.	1.549	34.667	0.00	1.331	27.755			
5005.	1.500	34.690	0.00	1.065	27.792			
5740.	1.564	34.693	0.00	1.034	27.796			

CAST	CG2-91-DI	-044	LAT	29	20.7N	LONG	151	58.3W	
PRES	TEMP	SAL	OXY	(ML/L)	POT	TEMP	SIG-TH	(C)	
(DB)	(C)	(PSU)	(ML/L)						
76.	19.282	35.283	0.00	19.268	25.170	101.	17.529	34.986	0.00
101.	19.272	35.281	0.00	19.254	25.172	201.	12.952	34.350	0.00
150.	18.528	35.134	0.00	18.502	25.251	302.	10.779	34.208	0.00
202.	14.548	34.520	0.00	14.518	25.707	400.	9.427	34.128	0.00
301.	11.550	34.253	0.00	11.512	26.101	501.	7.497	34.030	0.00
400.	9.635	34.127	0.00	9.590	26.339	650.	5.272	34.010	0.00
499.	7.533	34.029	0.00	7.484	26.586	800.	4.142	34.348	0.00
600.	5.936	34.006	0.00	5.884	26.782	900.	3.797	34.270	0.00
699.	4.946	34.059	0.00	4.890	26.942	1246.	3.073	34.482	0.00
898.	4.085	34.282	0.00	4.017	27.213	1500.	2.627	34.544	0.00
1112.	3.460	34.441	0.00	3.380	27.403	1751.	2.209	34.585	0.00
1396.	2.947	34.524	0.00	2.848	27.519	2098.	1.877	34.625	0.00
1698.	2.391	34.582	0.00	2.274	27.615	2250.	1.791	34.635	0.00
2002.	2.080	34.610	0.00	1.942	27.664	2250.	1.791	34.635	0.00
2502.	1.732	34.644	0.00	1.557	27.720	2501.	1.671	34.648	0.00
3003.	1.564	34.664	0.00	1.346	27.752	2753.	1.578	34.668	0.00
3509.	1.498	34.676	0.00	1.231	27.769	3251.	1.481	34.675	0.00
3509.	1.498	34.676	0.00	1.231	27.769	3251.	1.481	34.674	0.00
4104.	1.477	34.683	0.00	1.147	27.781	3506.	1.463	34.679	0.00
4104.	1.477	34.683	0.00	1.147	27.781	3756.	1.457	34.682	0.00
4607.	1.489	34.688	0.00	1.102	27.788	4255.	1.473	34.686	0.00
4607.	1.489	34.687	0.00	1.102	27.787	4759.	1.503	34.689	0.00
5431.	1.542	34.692	0.00	1.053	27.794	5006.	1.528	34.689	0.00
						5423.	1.570	34.690	0.00
									27.791
									27.791

CAST	CG2-91-DI	-047	LAT	29	20.7N	LONG	151	58.3W	
PRES	TEMP	SAL	OXY	(ML/L)	POT	TEMP	SIG-TH	(C)	
(DB)	(C)	(PSU)	(ML/L)						
51.	18.874	35.261	0.00	18.865	25.256	750.	4.370	34.100	0.00
100.	18.880	35.259	0.00	18.862	25.255	2000.	1.985	34.613	0.00
152.	16.978	34.885	0.00	16.953	25.438	3003.	1.533	34.664	0.00
200.	14.599	34.525	0.00	14.569	25.700	4006.	1.464	34.683	0.00
299.	11.257	34.208	0.00	11.220	26.119	4506.	1.488	34.687	0.00
399.	9.451	34.115	0.00	9.406	26.360	5005.	1.530	34.689	0.00
499.	7.691	34.036	0.00	7.641	26.569	5512.	1.582	34.689	0.00
601.	5.869	34.006	0.00	5.817	26.790				27.790
700.	4.847	34.070	0.00	4.791	26.962				27.790
800.	4.356	34.161	0.00	4.295	27.088				27.790
898.	4.033	34.272	0.00	3.966	27.211				27.790
998.	3.715	34.345	0.00	3.642	27.301				27.790
1298.	3.035	34.499	0.00	2.944	27.490				27.790
1600.	2.480	34.567	0.00	2.370	27.595				27.790
1900.	2.089	34.605	0.00	1.960	27.658				27.790
2902.	1.575	34.662	0.00	1.366	27.749				27.790
2902.	1.575	34.661	0.00	1.366	27.748				27.790
3405.	1.491	34.675	0.00	1.235	27.768				27.790
3904.	1.463	34.682	0.00	1.155	27.779				27.790
4408.	1.483	34.688	0.00	1.119	27.787				27.790
5113.	1.542	34.689	0.00	1.092	27.789				27.790
299.	11.257	34.191	0.00	1.081	27.791				27.790

CAST	CG2-91-DI	-049	LAT	32 10.1N	LONG	152 00.3W
PRES	TEMP	(C)	SAL	OXY	POT TEMP	SIG-TH
(DB)	(PSU)	(ML/L)	(C)	(ML/L)	(C)	
499.	7.183	34.016	0.00	7.135	26.625	
551.	6.246	33.991	0.00	6.197	26.731	
600.	5.533	33.992	0.00	5.483	26.820	
651.	5.015	34.016	0.00	4.963	26.899	
699.	4.695	34.045	0.00	4.640	26.959	
799.	4.164	34.138	0.00	4.104	27.090	
899.	3.849	34.227	0.00	3.783	27.193	
999.	3.593	34.324	0.00	3.521	27.297	
1099.	3.385	34.387	0.00	3.306	27.367	
1298.	2.968	34.486	0.00	2.877	27.486	
1298.	2.968	34.486	0.00	2.877	27.486	
1898.	2.056	34.600	0.00	1.927	27.657	
2101.	1.882	34.621	0.00	1.739	27.688	
2501.	1.882	34.622	0.00	1.739	27.689	
2502.	1.665	34.647	0.00	1.491	27.728	
2802.	1.571	34.659	0.00	1.371	27.746	
3101.	1.506	34.669	0.00	1.279	27.760	
3101.	1.506	34.669	0.00	1.279	27.760	
3404.	1.472	34.676	0.00	1.216	27.770	
3704.	1.458	34.681	0.00	1.172	27.777	
4106.	1.463	34.685	0.00	1.133	27.783	
4608.	1.490	34.687	0.00	1.103	27.787	
5004.	1.529	34.690	0.00	1.093	27.790	

CAST	CG2-91-DI	-051	LAT	32 40.0N	LONG	152 00.0W
PRES	TEMP	(C)	SAL	OXY	POT TEMP	SIG-TH
(DB)	(PSU)	(ML/L)	(C)	(ML/L)	(C)	
499.	7.183	34.016	0.00	7.135	26.625	
551.	6.246	33.991	0.00	6.197	26.731	
600.	5.533	33.992	0.00	5.483	26.820	
651.	5.015	34.016	0.00	4.963	26.899	
699.	4.695	34.045	0.00	4.640	26.959	
799.	4.164	34.138	0.00	4.104	27.090	
899.	3.849	34.227	0.00	3.783	27.193	
999.	3.593	34.324	0.00	3.521	27.297	
1099.	3.385	34.387	0.00	3.306	27.367	
1298.	2.968	34.486	0.00	2.877	27.486	
1298.	2.968	34.486	0.00	2.877	27.486	
1898.	2.056	34.600	0.00	1.927	27.657	
2101.	1.882	34.621	0.00	1.739	27.688	
2501.	1.882	34.622	0.00	1.739	27.689	
2502.	1.665	34.647	0.00	1.491	27.728	
2802.	1.571	34.659	0.00	1.371	27.746	
3101.	1.506	34.669	0.00	1.279	27.760	
3101.	1.506	34.669	0.00	1.279	27.760	
3404.	1.472	34.676	0.00	1.216	27.770	
3704.	1.458	34.681	0.00	1.172	27.777	
4106.	1.463	34.685	0.00	1.133	27.783	
4608.	1.490	34.687	0.00	1.103	27.787	
5004.	1.529	34.690	0.00	1.093	27.790	

CAST	CG2-91-DI	-050	LAT	32 10.5N	LONG	152 00.6W
PRES	TEMP	(C)	SAL	OXY	POT TEMP	SIG-TH
(DB)	(PSU)	(ML/L)	(C)	(ML/L)	(C)	
9.	16.627	34.747	0.00	16.626	25.409	
22.	16.636	34.747	0.00	16.632	25.408	
42.	16.634	34.746	0.00	16.627	25.408	
81.	16.643	34.747	0.00	16.630	25.408	
100.	16.642	34.747	0.00	16.626	25.409	
124.	16.637	34.747	0.00	16.617	25.411	
149.	16.625	34.746	0.00	16.601	25.414	
176.	13.070	34.226	0.00	13.046	25.785	
249.	11.085	34.192	0.00	11.054	26.137	
300.	10.298	34.159	0.00	10.263	26.251	
352.	9.668	34.130	0.00	9.628	26.335	
402.	8.801	34.087	0.00	8.758	26.442	

CAST	CG2-91-DI	-051	LAT	32 20.0N	LONG	152 00.0W
PRES	TEMP	(C)	SAL	OXY	POT TEMP	SIG-TH
(DB)	(PSU)	(ML/L)	(C)	(ML/L)	(C)	
9.	16.627	34.747	0.00	16.626	25.409	
32.	15.527	34.394	0.00	15.522	25.390	
127.	12.721	34.134	0.00	12.704	25.781	
152.	12.056	34.125	0.00	12.036	25.903	
176.	11.641	34.164	0.00	11.619	26.012	
176.	11.641	34.164	0.00	11.619	26.012	
299.	10.168	34.169	0.00	10.133	26.281	
351.	9.327	34.121	0.00	9.288	26.384	
451.	7.674	34.033	0.00	7.629	26.569	
550.	6.125	33.989	0.00	6.077	26.744	
550.	6.125	33.989	0.00	6.077	26.744	
751.	4.300	34.092	0.00	4.243	27.039	
850.	3.900	34.190	0.00	3.838	27.158	
1001.	3.531	34.316	0.00	3.459	27.296	
1001.	3.531	34.317	0.00	3.459	27.297	
1247.	3.030	34.454	0.00	2.943	27.454	
1373.	2.815	34.453	0.00	2.720	27.506	
1373.	2.815	34.493	0.00	2.720	27.506	
1999.	1.983	34.608	0.00	1.847	27.670	
3003.	1.543	34.663	0.00	1.325	27.752	
4007.	1.468	34.682	0.00	1.149	27.780	
5008.	1.531	34.690	0.00	1.095	27.790	
5008.	1.531	34.689	0.00	1.095	27.789	
5525.	1.585	34.690	0.00	1.082	27.791	

CAST CG2-91-DI -053 LAT 34 00.1N LONG 152 00.1W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
7.	15.536	34.400	0.00	15.535	25.392	
54.	15.516	34.395	0.00	15.508	25.394	
251.	10.761	34.202	0.00	10.731	26.203	
402.	8.495	34.059	0.00	8.453	26.467	
402.	8.495	34.059	0.00	8.453	26.467	
598.	5.734	33.992	0.00	5.683	26.796	
700.	4.678	34.046	0.00	4.623	26.961	
803.	4.045	34.145	0.00	3.986	27.108	
1000.	3.406	34.320	0.00	3.335	27.311	
1000.	3.406	34.320	0.00	3.335	27.311	
1499.	2.578	34.535	0.00	2.475	27.560	
1499.	2.578	34.535	0.00	2.475	27.560	
2252.	1.798	34.631	0.00	1.643	27.703	
2500.	1.684	34.644	0.00	1.510	27.724	
2754.	1.599	34.656	0.00	1.403	27.741	
3253.	1.498	34.671	0.00	1.257	27.764	
3508.	1.477	34.677	0.00	1.211	27.772	
3756.	1.466	34.680	0.00	1.174	27.776	
4255.	1.475	34.685	0.00	1.129	27.784	
4503.	1.490	34.687	0.00	1.115	27.786	
4759.	1.508	34.688	0.00	1.102	27.788	
5004.	1.531	34.689	0.00	1.095	27.789	
5632.	1.603	34.691	0.00	1.085	27.791	
5632.	1.603	34.690	0.00	1.086	27.791	

CAST CG2-91-DI -055 LAT 35 36.5N LONG 152 00.4W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
6.	14.725	33.928	0.00	14.724	25.206	
76.	14.617	33.965	0.00	14.606	25.260	
123.	13.369	33.996	0.00	13.352	25.545	
151.	11.518	33.943	0.00	11.499	25.862	
176.	10.648	33.964	0.00	10.627	26.035	
200.	10.269	33.990	0.00	10.246	26.122	
302.	9.078	34.048	0.00	9.045	26.366	
351.	8.447	34.030	0.00	8.410	26.451	
453.	7.057	33.988	0.00	7.014	26.620	
547.	5.563	33.988	0.00	5.517	26.812	
647.	4.536	34.059	0.00	4.487	26.986	
748.	4.090	34.130	0.00	4.035	27.091	
847.	3.692	34.220	0.00	3.631	27.203	
1073.	3.224	34.368	0.00	3.149	27.367	
1175.	3.081	34.439	0.00	2.999	27.437	
4006.	1.475	34.683	0.00	1.156	27.780	
5011.	1.535	34.687	0.00	1.098	27.787	
5760.	1.623	34.690	0.00	1.088	27.790	

CAST CG2-91-DI -056 LAT 36 17.8N LONG 152 02.7W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
7.	14.396	33.862	0.00	14.395	25.225	
53.	14.309	33.882	0.00	14.301	25.261	
53.	14.309	33.882	0.00	14.301	25.261	
404.	7.998	34.023	0.00	7.957	26.513	
601.	5.238	33.994	0.00	5.189	26.856	
2252.	1.833	34.622	0.00	1.678	27.694	
3502.	1.493	34.675	0.00	1.227	27.769	
4759.	1.515	34.688	0.00	1.109	27.787	
1000.	3.406	34.320	0.00	3.335	27.311	
1000.	3.406	34.320	0.00	3.335	27.311	
1499.	2.578	34.535	0.00	2.475	27.560	
1499.	2.578	34.535	0.00	2.475	27.560	
2252.	1.798	34.631	0.00	1.643	27.703	
2500.	1.684	34.644	0.00	1.510	27.724	
2754.	1.599	34.656	0.00	1.403	27.741	
3253.	1.498	34.671	0.00	1.257	27.764	
3508.	1.477	34.677	0.00	1.211	27.772	
3756.	1.466	34.680	0.00	1.174	27.776	
4255.	1.475	34.685	0.00	1.129	27.784	
4503.	1.490	34.687	0.00	1.115	27.786	
4759.	1.508	34.688	0.00	1.102	27.788	
5004.	1.531	34.689	0.00	1.095	27.789	
5632.	1.603	34.691	0.00	1.085	27.791	
5632.	1.603	34.690	0.00	1.086	27.791	

CAST CG2-91-DI -058 LAT 37 09.9N LONG 151 57.6W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
9.	14.436	33.881	0.00	14.435	25.232	
23.	14.424	33.881	0.00	14.421	25.235	
43.	14.321	33.887	0.00	14.315	25.262	
62.	13.990	33.892	0.00	13.981	25.335	
81.	13.868	33.902	0.00	13.856	25.369	
102.	14.012	33.998	0.00	13.997	25.414	
102.	14.012	33.999	0.00	13.997	25.415	
151.	11.869	33.984	0.00	11.850	25.829	
176.	11.346	34.044	0.00	11.324	25.973	
250.	10.136	34.124	0.00	10.107	26.250	
306.	9.247	34.067	0.00	9.213	26.354	
351.	8.682	34.038	0.00	8.645	26.421	
396.	8.148	34.027	0.00	8.108	26.494	

CAST CG2-91-DI -059 LAT 37 59.9N LONG 152 00.0W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	13.461	33.771	0.00	13.460	25.349	
76.	13.382	33.786	0.00	13.372	25.379	
126.	11.513	34.008	0.00	11.497	25.913	
151.	11.036	34.030	0.00	11.018	26.017	
176.	10.921	34.116	0.00	10.900	26.106	
201.	10.518	34.108	0.00	10.494	26.171	
299.	9.185	34.081	0.00	9.152	26.375	
348.	8.239	34.012	0.00	8.203	26.468	
450.	6.950	33.988	0.00	6.908	26.634	
549.	5.713	33.982	0.00	5.667	26.790	
649.	4.810	34.033	0.00	4.759	26.936	
749.	4.247	34.103	0.00	4.191	27.053	
851.	3.861	34.173	0.00	3.799	27.149	
924.	3.616	34.229	0.00	3.550	27.218	
1075.	3.299	34.310	0.00	3.223	27.314	
1174.	3.065	34.371	0.00	2.983	27.385	
1174.	3.065	34.372	0.00	2.983	27.385	
1174.	3.065	34.373	0.00	2.983	27.386	
1499.	2.594	34.499	0.00	2.491	27.530	
2000.	2.013	34.596	0.00	1.877	27.658	
3002.	1.554	34.660	0.00	1.336	27.749	
4005.	1.477	34.681	0.00	1.158	27.778	
4755.	1.516	34.687	0.00	1.111	27.786	
5022.	1.545	34.688	0.00	1.107	27.788	

CAST CG2-91-DI -060 LAT 38 40.2N LONG 151 59.9W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
6.	13.018	33.655	0.00	13.017	25.348	
51.	12.524	33.632	0.00	12.517	25.428	
101.	11.693	33.708	0.00	11.680	25.646	
251.	9.401	34.076	0.00	9.373	26.335	
399.	7.496	34.005	0.00	7.457	26.571	
497.	6.133	33.976	0.00	6.089	26.732	
600.	5.153	34.007	0.00	5.105	26.876	
699.	4.401	34.073	0.00	4.348	27.012	
7248.	1.845	34.614	0.00	1.690	27.686	
2500.	1.717	34.634	0.00	1.542	27.713	
2751.	1.641	34.646	0.00	1.445	27.730	
3252.	1.533	34.665	0.00	1.291	27.756	
3505.	1.499	34.674	0.00	1.232	27.768	
4254.	1.485	34.677	0.00	1.193	27.773	
4508.	1.510	34.683	0.00	1.144	27.781	
4756.	1.530	34.686	0.00	1.124	27.785	
5007.	1.550	34.687	0.00	1.113	27.786	
5353.	1.581	34.689	0.00	1.100	27.789	

CAST CG2-91-DI -061 LAT 39 21.0N LONG 151 59.2W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
9.	12.891	33.660	0.00	12.890	25.377	
33.	12.793	33.652	0.00	12.789	25.391	
77.	12.628	33.655	0.00	12.618	25.427	
127.	10.928	33.796	0.00	10.913	25.854	
152.	10.345	33.846	0.00	10.327	25.995	
177.	10.174	33.942	0.00	10.154	26.100	
202.	10.121	34.057	0.00	10.098	26.199	
202.	10.121	34.056	0.00	10.098	26.199	
349.	8.130	34.013	0.00	8.094	26.485	
349.	8.130	34.013	0.00	8.094	26.485	
450.	6.912	33.983	0.00	6.870	26.636	
652.	4.728	34.039	0.00	4.677	26.950	
652.	4.728	34.040	0.00	4.677	26.951	
819.	3.666	34.192	0.00	3.608	27.183	
924.	3.556	34.241	0.00	3.490	27.233	
1075.	3.195	34.329	0.00	3.120	27.338	
1075.	3.195	34.330	0.00	3.120	27.339	
1500.	2.546	34.501	0.00	2.444	27.536	
1999.	2.025	34.593	0.00	1.988	27.654	
3002.	1.568	34.658	0.00	1.350	27.747	
4008.	1.487	34.681	0.00	1.168	27.778	
5005.	1.567	34.685	0.00	1.130	27.784	
5513.	1.615	34.687	0.00	1.113	27.786	

CAST CG2-91-DI -062 LAT 40 00.9N LONG 151 59.6W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	11.880	33.502	0.00	11.879	25.449	
52.	11.766	33.501	0.00	11.759	25.471	
103.	10.972	33.808	0.00	10.960	25.375	
251.	8.952	34.036	0.00	8.925	26.617	
400.	7.018	33.978	0.00	6.981	26.759	
501.	5.874	33.969	0.00	5.831	26.909	
600.	4.925	34.016	0.00	4.878	26.971	
701.	4.331	34.102	0.00	4.278	27.043	
701.	4.331	34.103	0.00	4.278	27.044	
999.	3.339	34.294	0.00	3.269	27.297	
1248.	2.878	34.419	0.00	2.792	27.440	
1749.	2.269	34.553	0.00	2.150	27.602	
2250.	1.835	34.617	0.00	1.680	27.690	
2250.	1.835	34.617	0.00	1.680	27.690	
2749.	1.630	34.649	0.00	1.434	27.733	
3252.	1.523	34.666	0.00	1.281	27.758	
3252.	1.523	34.667	0.00	1.281	27.759	
3506.	1.498	34.673	0.00	1.231	27.767	
3755.	1.488	34.683	0.00	1.196	27.777	
4255.	1.504	34.685	0.00	1.157	27.782	
4506.	1.522	34.686	0.00	1.146	27.783	
4758.	1.545	34.685	0.00	1.138	27.783	
5007.	1.567	34.689	0.00	1.130	27.787	
5277.	1.597	34.689	0.00	1.125	27.787	

CAST CG2-91-DI -064 LAT 41 21.0N LONG 152 00.3W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	11.880	33.502	0.00	11.879	25.449	
52.	11.766	33.501	0.00	11.759	25.471	
103.	10.972	33.808	0.00	10.960	25.375	
251.	8.952	34.036	0.00	8.925	26.617	
400.	7.018	33.978	0.00	6.981	26.759	
501.	5.874	33.969	0.00	5.831	26.909	
600.	4.925	34.016	0.00	4.878	26.971	
701.	4.331	34.102	0.00	4.278	27.043	
701.	4.331	34.103	0.00	4.278	27.044	
999.	3.339	34.294	0.00	3.269	27.297	
1248.	2.878	34.419	0.00	2.792	27.440	
1749.	2.269	34.553	0.00	2.150	27.602	
2250.	1.835	34.617	0.00	1.680	27.690	
2250.	1.835	34.617	0.00	1.680	27.690	
2749.	1.630	34.649	0.00	1.434	27.733	
3252.	1.523	34.666	0.00	1.281	27.758	
3252.	1.523	34.667	0.00	1.281	27.759	
3506.	1.498	34.673	0.00	1.231	27.767	
3755.	1.488	34.683	0.00	1.196	27.777	
4255.	1.504	34.685	0.00	1.157	27.782	
4506.	1.522	34.686	0.00	1.146	27.783	
4758.	1.545	34.685	0.00	1.138	27.783	
5007.	1.567	34.689	0.00	1.130	27.787	
5277.	1.597	34.689	0.00	1.125	27.787	

CAST CG2-91-DI -065 LAT 41 59.9N LONG 151 59.2W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	11.880	33.502	0.00	11.879	25.449	
52.	11.766	33.501	0.00	11.759	25.471	
103.	10.972	33.808	0.00	10.960	25.375	
251.	8.952	34.036	0.00	8.925	26.617	
400.	7.018	33.978	0.00	6.981	26.759	
501.	5.874	33.969	0.00	5.831	26.909	
600.	4.925	34.016	0.00	4.878	26.971	
701.	4.331	34.102	0.00	4.278	27.043	
701.	4.331	34.103	0.00	4.278	27.044	
999.	3.339	34.294	0.00	3.269	27.297	
1248.	2.878	34.419	0.00	2.792	27.440	
1749.	2.269	34.553	0.00	2.150	27.602	
2250.	1.835	34.617	0.00	1.680	27.690	
2250.	1.835	34.617	0.00	1.680	27.690	
2749.	1.630	34.649	0.00	1.434	27.733	
3252.	1.523	34.666	0.00	1.281	27.758	
3252.	1.523	34.667	0.00	1.281	27.759	
3506.	1.498	34.673	0.00	1.231	27.767	
3755.	1.488	34.683	0.00	1.196	27.777	
4255.	1.504	34.685	0.00	1.157	27.782	
4506.	1.522	34.686	0.00	1.146	27.783	
4758.	1.545	34.685	0.00	1.138	27.783	
5007.	1.567	34.689	0.00	1.130	27.787	
5277.	1.597	34.689	0.00	1.125	27.787	

CAST CG2-91-DI -066 LAT 41 59.6N LONG 151 59.1W							CAST CG2-91-DI -068 LAT 43 20.0N LONG 152 00.0W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH		
8.	10.046	33.230	0.00	10.045	25.563	8.	9.284	33.062	0.00	9.283	25.556		
8.	10.046	33.230	0.00	10.045	25.563	8.	9.284	33.062	0.00	9.283	25.556		
8.	10.050	33.229	0.00	10.049	25.561	50.	9.257	33.062	0.00	9.252	25.561		
8.	10.044	33.227	0.00	10.043	25.561	100.	8.782	33.147	0.00	8.772	25.703		
23.	10.034	33.224	0.00	10.031	25.560	250.	7.083	33.942	0.00	7.060	26.577		
61.	9.802	33.191	0.00	9.795	25.574	400.	5.336	33.904	0.00	5.304	26.771		
82.	9.466	33.267	0.00	9.457	25.689	500.	4.842	33.980	0.00	4.803	26.889		
103.	9.004	33.706	0.00	8.993	26.106	597.	4.320	34.060	0.00	4.276	27.010		
128.	8.910	33.809	0.00	8.896	26.202	698.	4.026	34.150	0.00	3.975	27.113		
151.	8.689	33.862	0.00	8.673	26.279	797.	3.642	34.227	0.00	3.586	27.213		
176.	8.821	34.002	0.00	8.802	26.368	998.	3.180	34.323	0.00	3.111	27.335		
203.	8.480	34.011	0.00	8.459	26.428	1248.	2.759	34.414	0.00	2.674	27.446		
251.	7.883	33.982	0.00	7.858	26.495	1499.	2.420	34.491	0.00	2.319	27.538		
299.	7.245	33.966	0.00	7.217	26.575	1750.	2.163	34.545	0.00	2.045	27.604		
350.	6.404	33.928	0.00	6.373	26.658	1750.	2.163	34.545	0.00	2.045	27.604		
449.	5.490	33.929	0.00	5.453	26.773	1750.	2.163	34.545	0.00	2.045	27.604		
502.	5.032	33.958	0.00	4.992	26.850	2500.	1.714	34.632	0.00	1.539	27.712		
552.	4.774	33.989	0.00	4.731	26.904	2500.	1.714	34.633	0.00	1.539	27.713		
600.	4.541	34.030	0.00	4.495	26.962	2751.	1.623	34.647	0.00	1.427	27.732		
649.	4.314	34.087	0.00	4.265	27.032	3753.	1.477	34.684	0.00	1.185	27.779		
691.	4.157	34.119	0.00	4.106	27.074	4255.	1.492	34.686	0.00	1.145	27.783		
749.	3.949	34.167	0.00	3.894	27.134	4504.	1.513	34.688	0.00	1.137	27.785		
						4757.	1.539	34.685	0.00	1.133	27.783		
						5009.	1.569	34.687	0.00	1.131	27.785		
CAST CG2-91-DI -067 LAT 42 40.8N LONG 151 58.5W							CAST CG2-91-DI -069 LAT 44 25.1N LONG 151 59.8W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH		
8.	9.646	33.098	0.00	9.645	25.526	8.	8.615	32.994	0.00	8.614	25.607		
31.	9.639	33.099	0.00	9.636	25.528	31.	8.612	32.996	0.00	8.609	25.610		
78.	9.263	33.200	0.00	9.255	25.669	79.	8.584	33.003	0.00	8.576	25.620		
126.	8.136	33.737	0.00	8.123	26.264	127.	7.179	33.513	0.00	7.167	26.225		
151.	8.289	33.846	0.00	8.274	26.327	153.	7.758	33.752	0.00	7.743	26.332		
175.	8.265	33.951	0.00	8.247	26.413	177.	7.994	33.950	0.00	7.976	26.453		
202.	7.859	33.976	0.00	7.839	26.494	202.	7.484	33.965	0.00	7.465	26.539		
301.	6.429	33.915	0.00	6.402	26.644	202.	7.484	33.965	0.00	7.465	26.539		
347.	5.789	33.900	0.00	5.760	26.713	349.	5.421	33.950	0.00	5.393	26.797		
450.	5.035	33.949	0.00	5.000	26.842	549.	4.457	34.045	0.00	4.416	26.983		
549.	4.581	34.043	0.00	4.539	26.968	649.	4.122	34.122	0.00	4.074	27.080		
649.	4.182	34.117	0.00	4.134	27.070	749.	3.794	34.192	0.00	3.740	27.170		
749.	3.870	34.187	0.00	3.816	27.158	848.	3.517	34.251	0.00	3.457	27.244		
848.	3.609	34.240	0.00	3.549	27.227	923.	3.340	34.287	0.00	3.276	27.290		
922.	3.419	34.277	0.00	3.354	27.275	1073.	3.017	34.357	0.00	2.944	27.377		
1074.	3.086	34.345	0.00	3.012	27.361	1173.	2.864	34.392	0.00	2.784	27.419		
1176.	2.883	34.390	0.00	2.803	27.416	1375.	2.594	34.455	0.00	2.501	27.494		
1331.	2.648	34.437	0.00	2.558	27.475	1499.	2.424	34.489	0.00	2.323	27.536		
1500.	2.452	34.488	0.00	2.351	27.533	1999.	1.974	34.581	0.00	1.838	27.649		
1999.	1.990	34.585	0.00	1.854	27.651	3002.	1.570	34.656	0.00	1.352	27.745		
3002.	1.574	34.658	0.00	1.355	27.746	4008.	1.476	34.681	0.00	1.157	27.778		
4006.	1.483	34.683	0.00	1.164	27.780								
5008.	1.572	34.686	0.00	1.134	27.784								
5222.	1.598	34.688	0.00	1.133	27.786								

CAST CG2-91-DI -070 LAT 45 00.1N LONG 151 59.0W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
9.	8.408	32.959	0.00	8.407	25.611
50.	8.409	32.960	0.00	8.404	25.613
102.	8.161	33.110	0.00	8.151	25.768
252.	6.114	33.871	0.00	6.092	26.649
400.	4.748	33.883	0.00	4.718	26.821
500.	4.449	34.003	0.00	4.412	26.950
600.	4.054	34.082	0.00	4.011	27.055
699.	3.837	34.173	0.00	3.787	27.150
799.	3.559	34.240	0.00	3.503	27.231
1500.	2.430	34.486	0.00	2.329	27.533
2751.	1.636	34.644	0.00	1.440	27.729
3253.	1.531	34.664	0.00	1.289	27.756
3756.	1.477	34.678	0.00	1.185	27.774
4257.	1.488	34.672	0.00	1.141	27.772
4506.	1.507	34.685	0.00	1.131	27.783
4763.	1.533	34.680	0.00	1.126	27.780

CAST CG2-91-DI -072 LAT 45 41.0N LONG 151 59.0W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
9.	8.408	32.959	0.00	8.407	25.611
50.	8.409	32.960	0.00	8.404	25.613
102.	8.161	33.110	0.00	8.151	25.768
252.	6.114	33.871	0.00	6.092	26.649
400.	4.748	33.883	0.00	4.718	26.821
500.	4.449	34.003	0.00	4.412	26.950
600.	4.054	34.082	0.00	4.011	27.055
699.	3.837	34.173	0.00	3.787	27.150
799.	3.559	34.240	0.00	3.503	27.231
1500.	2.430	34.486	0.00	2.329	27.533
2751.	1.636	34.644	0.00	1.440	27.729
3253.	1.531	34.664	0.00	1.289	27.756
3756.	1.477	34.678	0.00	1.185	27.774
4257.	1.488	34.672	0.00	1.141	27.772
4506.	1.507	34.685	0.00	1.131	27.783
4763.	1.533	34.680	0.00	1.126	27.780

CAST CG2-91-DI -071 LAT 45 41.0N LONG 151 59.7W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
750.	3.572	34.219	0.00	3.520	27.213
799.	3.465	34.245	0.00	3.409	27.244
923.	3.218	34.311	0.00	3.155	27.321
1073.	2.937	34.371	0.00	2.864	27.395
1173.	2.772	34.406	0.00	2.693	27.438
1374.	2.538	34.460	0.00	2.446	27.503
1498.	2.394	34.491	0.00	2.294	27.540
3004.	1.588	34.653	0.00	1.369	27.741
4006.	1.481	34.680	0.00	1.162	27.777
5007.	1.562	34.686	0.00	1.125	27.785
5336.	1.602	34.686	0.00	1.122	27.785

CAST CG2-91-DI -072 LAT 45 41.0N LONG 151 59.7W					
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
9.	8.	7.947	32.876	0.00	7.946
50.	32.	7.946	32.875	0.00	7.943
102.	75.	7.886	32.873	0.00	7.879
252.	126.	6.478	33.329	0.00	6.467
400.	150.	6.585	33.594	0.00	6.572
500.	175.	6.470	33.780	0.00	6.455
600.	199.	6.229	33.837	0.00	6.212
699.	302.	5.047	33.840	0.00	5.024
799.	348.	4.718	33.866	0.00	4.692
1500.	450.	4.275	33.953	0.00	4.242
2751.	550.	4.046	34.076	0.00	4.006
3253.	647.	3.794	34.146	0.00	3.748

CAST	CG2-91-DI	-074	LAT	47 00.3N	LONG	151 59.9W	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
5.	7.566	32.844	0.00	7.566	25.643		30.	6.359	32.667	0.00	6.357	25.665
5.	7.566	32.845	0.00	7.566	25.644		76.	6.362	32.666	0.00	6.356	25.665
5.	7.566	32.844	0.00	7.566	25.643		123.	5.006	33.185	0.00	4.997	26.237
42.	7.568	32.847	0.00	7.564	25.646		149.	5.829	33.712	0.00	5.817	26.558
82.	7.134	32.807	0.00	7.127	25.675		174.	5.544	33.794	0.00	5.530	26.657
101.	6.475	33.311	0.00	6.466	26.159		200.	5.190	33.785	0.00	5.174	26.692
127.	6.448	33.413	0.00	6.437	26.243		300.	4.266	33.814	0.00	4.245	26.818
151.	6.436	33.545	0.00	6.423	26.349		352.	4.177	33.883	0.00	4.152	26.882
178.	6.050	33.738	0.00	6.035	26.551		452.	3.877	33.993	0.00	3.845	27.001
203.	5.764	33.805	0.00	5.747	26.640		547.	3.779	34.076	0.00	3.741	27.077
252.	5.152	33.815	0.00	5.132	26.721		648.	3.677	34.174	0.00	3.632	27.166
303.	4.746	33.891	0.00	4.723	26.827		746.	3.446	34.239	0.00	3.395	27.241
351.	4.447	33.904	0.00	4.421	26.870		848.	3.252	34.291	0.00	3.194	27.301
403.	4.352	33.966	0.00	4.323	26.930		923.	3.102	34.324	0.00	3.039	27.342
							1076.	2.838	34.391	0.00	2.766	27.420
							1175.	2.716	34.417	0.00	2.637	27.452
							1371.	2.458	34.470	0.00	2.367	27.517
							1495.	2.349	34.496	0.00	2.249	27.548
							2000.	1.975	34.581	0.00	1.839	27.649
							3002.	1.595	34.654	0.00	1.376	27.741
							4006.	1.486	34.682	0.00	1.167	27.779
							5004.	1.565	34.689	0.00	1.128	27.787
							5161.	1.584	34.686	0.00	1.128	27.785
										0.00	1.127	27.785

CAST	CG2-91-DI	-074	LAT	47 00.3N	LONG	151 59.9W	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
5.	7.566	32.844	0.00	7.566	25.643		30.	6.359	32.667	0.00	6.357	25.665
5.	7.566	32.845	0.00	7.566	25.644		76.	6.362	32.666	0.00	6.356	25.665
5.	7.566	32.844	0.00	7.566	25.643		123.	5.006	33.185	0.00	4.997	26.237
42.	7.568	32.847	0.00	7.564	25.646		149.	5.829	33.712	0.00	5.817	26.558
82.	7.134	32.807	0.00	7.127	25.675		174.	5.544	33.794	0.00	5.530	26.657
101.	6.475	33.311	0.00	6.466	26.159		200.	5.190	33.785	0.00	5.174	26.692
127.	6.448	33.413	0.00	6.437	26.243		300.	4.266	33.814	0.00	4.245	26.818
151.	6.436	33.545	0.00	6.423	26.349		352.	4.177	33.883	0.00	4.152	26.882
178.	6.050	33.738	0.00	6.035	26.551		452.	3.877	33.993	0.00	3.845	27.001
203.	5.764	33.805	0.00	5.747	26.640		547.	3.779	34.076	0.00	3.741	27.077
252.	5.152	33.815	0.00	5.132	26.721		648.	3.677	34.174	0.00	3.632	27.166
303.	4.746	33.891	0.00	4.723	26.827		746.	3.446	34.239	0.00	3.395	27.241
351.	4.447	33.904	0.00	4.421	26.870		848.	3.252	34.291	0.00	3.194	27.301
403.	4.352	33.966	0.00	4.323	26.930		923.	3.102	34.324	0.00	3.039	27.342
							1076.	2.838	34.391	0.00	2.766	27.420
							1175.	2.716	34.417	0.00	2.637	27.452
							1371.	2.458	34.470	0.00	2.367	27.517
							1495.	2.349	34.496	0.00	2.249	27.548
							2000.	1.975	34.581	0.00	1.839	27.649
							3002.	1.595	34.654	0.00	1.376	27.741
							4006.	1.486	34.682	0.00	1.167	27.779
							5004.	1.565	34.689	0.00	1.128	27.787
							5161.	1.584	34.686	0.00	1.128	27.785
										0.00	1.127	27.785

CAST	CG2-91-DI	-075	LAT	47 00.0N	LONG	152 00.0W	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH
449.	4.213	33.975	0.00	4.181	26.952		52.	5.985	32.630	0.00	5.981	25.683
501.	4.119	34.027	0.00	4.083	27.004		103.	5.849	32.626	0.00	5.841	25.697
549.	4.018	34.074	0.00	3.979	27.052		253.	4.141	33.770	0.00	4.123	26.795
599.	3.914	34.116	0.00	3.871	27.096		401.	3.809	33.928	0.00	3.781	26.955
649.	3.810	34.158	0.00	3.764	27.140		491.	3.790	33.928	0.00	3.755	26.958
649.	3.810	34.185	0.00	3.764	27.162		600.	3.663	34.057	0.00	3.621	27.074
749.	3.579	34.220	0.00	3.527	27.213		702.	3.459	34.230	0.00	3.411	27.232
798.	3.439	34.255	0.00	3.384	27.255		799.	3.262	34.280	0.00	3.208	27.291
899.	3.240	34.308	0.00	3.178	27.316		1251.	2.565	34.446	0.00	2.482	27.488
997.	3.055	34.345	0.00	2.987	27.363		1498.	2.339	34.499	0.00	2.239	27.551
1074.	2.915	34.376	0.00	2.842	27.401		1751.	2.148	34.543	0.00	2.030	27.603
1250.	2.667	34.434	0.00	2.583	27.470		2249.	1.843	34.607	0.00	1.688	27.681*
1497.	2.398	34.490	0.00	2.298	27.539		2249.	1.843	34.607*	0.00	1.688*	27.681*
1748.	2.189	34.540	0.00	2.071	27.598		2500.	1.743	34.625	0.00	1.568	27.704
1998.	2.000	34.580	0.00	1.864	27.646		2751.	1.655	34.641	0.00	1.458	27.725
2250.	1.865	34.606	0.00	1.709	27.678		3254.	1.546	34.662	0.00	1.304	27.753
2500.	1.761	34.625	0.00	1.585	27.703		3501.	1.503	34.672	0.00	1.237	27.766
2753.	1.667	34.639	0.00	1.470	27.723		3755.	1.484	34.677	0.00	1.192	27.773
3254.	1.551	34.664	0.00	1.308	27.754		4255.	1.497	34.684	0.00	1.150	27.781
3254.	1.551	34.664	0.00	1.308	27.754		4506.	1.517	34.684	0.00	1.141	27.782
4008.	1.488	34.682	0.00	1.169	27.778		4758.	1.539	34.686	0.00	1.132	27.784
4509.	1.516	34.690	0.00	1.139	27.787		5119.	1.581	34.687	0.00	1.129	27.785
5007.	1.561	34.688	0.00	1.124	27.786		6.	6.026	32.631	0.00	6.026	25.678
5235.	1.589	34.688	0.00	1.123	27.786							

* Calculated from CTD values

CAST CG2-91-DI -078 LAT 53 29.7N LONG 152 00.7W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
35.	4.046	32.776	0.00	4.044	26.013	
64.	4.034	32.776	0.00	4.030	26.014	
101.	4.084	33.593	0.00	4.077	26.659	
149.	4.187	33.795	0.00	4.177	26.810	
202.	4.023	33.899	0.00	4.009	26.909	
298.	3.856	34.006	0.00	3.836	27.012	
402.	3.729	34.108	0.00	3.702	27.107	
496.	3.591	34.169	0.00	3.557	27.169	
601.	3.358	34.250	0.00	3.318	27.257	
697.	3.184	34.295	0.00	3.138	27.310	
802.	3.000	34.340	0.00	2.947	27.363	
951.	2.791	34.387	0.00	2.729	27.420	
1200.	2.491	34.458	0.00	2.412	27.504	
1447.	2.281	34.508	0.00	2.186	27.563	
1693.	2.114	34.545	0.00	2.001	27.607	
2000.	1.905	34.590	0.00	1.770	27.661	
2502.	1.698	34.630	0.00	1.523	27.712	
2998.	1.574	34.655	0.00	1.356	27.744	
3500.	1.501	34.672	0.00	1.235	27.766	
4005.	1.494	34.678	0.00	1.175	27.775	
4505.	1.508	34.687	0.00	1.132	27.785	
4764.	1.526	34.686	0.00	1.119	27.785	

CAST CG2-91-DI -080 LAT 55 26.7N LONG 152 00.7W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
35.	4.046	32.776	0.00	4.044	26.013	
64.	4.034	32.776	0.00	4.030	26.014	
101.	4.084	33.593	0.00	4.077	26.659	
149.	4.187	33.795	0.00	4.177	26.810	
202.	4.023	33.899	0.00	4.009	26.909	
298.	3.856	34.006	0.00	3.836	27.012	
402.	3.729	34.108	0.00	3.702	27.107	
496.	3.591	34.169	0.00	3.557	27.169	
601.	3.358	34.250	0.00	3.318	27.257	
697.	3.184	34.295	0.00	3.138	27.310	
802.	3.000	34.340	0.00	2.947	27.363	
951.	2.791	34.387	0.00	2.729	27.420	
1200.	2.491	34.458	0.00	2.412	27.504	
1447.	2.281	34.508	0.00	2.186	27.563	
1693.	2.114	34.545	0.00	2.001	27.607	
2000.	1.905	34.590	0.00	1.770	27.661	
2502.	1.698	34.630	0.00	1.523	27.712	
2998.	1.574	34.655	0.00	1.356	27.744	
3500.	1.501	34.672	0.00	1.235	27.766	
4005.	1.494	34.678	0.00	1.175	27.775	
4505.	1.508	34.687	0.00	1.132	27.785	
4764.	1.526	34.686	0.00	1.119	27.785	

CAST CG2-91-DI -081 LAT 55 27.3N LONG 152 00.7W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	3.440	32.876	0.00	3.440	26.150	
32.	3.439	32.876	0.00	3.437	26.151	
63.	3.445	32.876	0.00	3.441	26.150	
100.	3.456	32.893	0.00	3.450	26.163	
153.	4.189	33.815	0.00	4.178	26.825	
202.	4.070	33.918	0.00	4.056	26.920	
301.	3.912	34.022	0.00	3.891	27.019	
402.	3.775	34.109	0.00	3.747	27.103	
503.	3.588	34.186	0.00	3.554	27.183	
601.	3.410	34.240	0.00	3.369	27.244	
699.	3.238	34.288	0.00	3.191	27.299	
796.	3.073	34.327	0.00	3.020	27.346	
897.	2.930	34.364	0.00	2.870	27.389	
999.	2.796	34.394	0.00	2.730	27.426	
1199.	2.528	34.451	0.00	2.449	27.495	
1451.	2.281	34.507	0.00	2.185	27.562	
1699.	2.090	34.550	0.00	1.977	27.613	
2003.	1.914	34.587	0.00	1.779	27.658	
2499.	1.709	34.653	0.00	1.534	27.729	
3004.	1.590	34.653	0.00	1.371	27.741	
3004.	1.590	34.653	0.00	1.371	27.741	
3506.	1.516	34.669	0.00	1.249	27.762	
4006.	1.510	34.678	0.00	1.190	27.774	
4352.	1.505	34.684	0.00	1.147	27.782	

CAST CG2-91-DI -082 LAT 55 51.9N LONG 152 55.7W							CAST CG2-91-DI -084 LAT 56 14.5N LONG 153 10.8W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH		
8.	3.670	32.664	0.00	3.670	25.960	8.	3.850	32.639	0.00	3.850	25.923		
33.	3.654	32.670	0.00	3.652	25.967	31.	3.855	32.641	0.00	3.853	25.924		
62.	3.305	32.845	0.00	3.301	26.138	62.	3.861	32.642	0.00	3.857	25.925		
99.	3.260	32.863	0.00	3.254	26.157	101.	4.154	32.734	0.00	4.147	25.969		
149.	4.144	33.656	0.00	4.134	26.704	152.	5.321	33.256	0.00	5.309	26.258		
149.	4.144	33.656	0.00	4.134	26.704	201.	5.636	33.538	0.00	5.620	26.444		
175.	4.132	33.845	0.00	4.120	26.855	301.	4.762	33.866	0.00	4.739	26.806		
201.	4.072	33.886	0.00	4.058	26.894	400.	4.177	33.977	0.00	4.148	26.957		
300.	3.970	34.006	0.00	3.949	27.001	500.	4.025	34.073	0.00	3.989	27.050		
400.	3.902	34.106	0.00	3.874	27.088	599.	3.826	34.140	0.00	3.784	27.124		
499.	3.710	34.153	0.00	3.676	27.145	699.	3.651	34.196	0.00	3.602	27.187		
601.	3.548	34.220	0.00	3.507	27.215	699.	3.651	34.196	0.00	3.602	27.187		
697.	3.400	34.270	0.00	3.352	27.270	798.	3.443	34.309	0.00	3.388	27.297		
795.	3.217	34.309	0.00	3.163	27.319	899.	3.189	34.326	0.00	3.128	27.335		
898.	3.047	34.346	0.00	2.987	27.364	933.	3.059	34.333	0.00	2.996	27.353		
997.	2.885	34.376	0.00	2.818	27.403	933.	3.059	34.334	0.00	2.996	27.354		
1198.	2.616	34.435	0.00	2.537	27.475								
1449.	2.303	34.502	0.00	2.207	27.556								
1698.	2.095	34.548	0.00	1.982	27.611								
1698.	2.095	34.548	0.00	1.982	27.611								
2500.	1.697	34.630	0.00	1.522	27.712								
3000.	1.579	34.654	0.00	1.361	27.743								
3502.	1.496	34.672	0.00	1.230	27.766								
3502.	1.496	34.672	0.00	1.230	27.766								

CAST CG2-91-DI -083 LAT 56 01.6N LONG 153 02.7W							CAST CG2-91-DI -085 LAT 56 17.7N LONG 153 13.9W						
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH		
8.	3.574	32.594	0.00	3.573	25.913	7.	3.696	32.659	0.00	3.696	25.954		
32.	3.548	32.592	0.00	3.546	25.914	21.	3.697	32.663	0.00	3.696	25.957		
61.	3.460	32.583	0.00	3.456	25.916	29.	3.717	32.667	0.00	3.715	25.958		
102.	3.999	32.725	0.00	3.992	25.978	51.	3.745	32.686	0.00	3.742	25.971		
112.	4.508	32.871	0.00	4.500	26.101	78.	3.658	32.697	0.00	3.653	25.988		
127.	4.516	32.946	0.00	4.507	26.101	98.	3.714	32.714	0.00	3.708	25.996		
151.	5.415	33.357	0.00	5.403	26.327	126.	4.056	32.785	0.00	4.048	26.020		
200.	4.959	33.825	0.00	4.944	26.750	126.	4.056	32.786	0.00	4.048	26.021		
251.	4.611	33.879	0.00	4.593	26.832	178.	4.809	33.151	0.00	4.796	26.232		
300.	4.404	33.929	0.00	4.382	26.894	200.	5.334	33.135	0.00	5.318	26.161		
401.	4.013	34.007	0.00	3.985	26.998	222.	5.298	33.720	0.00	5.281	26.628		
501.	3.911	34.108	0.00	3.876	27.089	239.	5.125	33.763	0.00	5.106	26.683		
600.	3.707	34.183	0.00	3.665	27.170								
700.	3.504	34.238	0.00	3.456	27.234								
798.	3.326	34.287	0.00	3.271	27.291								
898.	3.156	34.323	0.00	3.095	27.336								
996.	2.977	34.359	0.00	2.910	27.382								
1096.	2.814	34.395	0.00	2.741	27.425								
1096.	2.814	34.395	0.00	2.741	27.425								
1400.	2.440	34.474	0.00	2.347	27.522								
1598.	2.237	34.518	0.00	2.130	27.575								
1799.	2.074	34.554	0.00	1.953	27.618								
1940.	1.923	34.584	0.00	1.793	27.655								

CAST CG2-91-DI		-086	LAT 55	04.2N	LONG 152	17.9W
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
8.	3.539	32.827	0.00	3.538	26.102	
32.	3.520	32.828	0.00	3.518	26.105	
65.	3.280	32.836	0.00	3.276	26.134	
101.	3.512	33.070	0.00	3.506	26.299	
101.	3.512	33.070	0.00	3.506	26.299	
151.	4.109	33.844	0.00	4.099	26.857	
202.	4.012	33.922	0.00	3.998	26.929	
301.	3.865	34.023	0.00	3.844	27.025	
399.	3.758	34.109	0.00	3.731	27.105	
502.	3.595	34.174	0.00	3.561	27.173	
599.	3.442	34.231	0.00	3.401	27.234	
702.	3.204	34.288	0.00	3.157	27.302	
799.	3.026	34.332	0.00	2.973	27.354	
900.	2.880	34.368	0.00	2.821	27.397	
1000.	2.748	34.400	0.00	2.682	27.434	
1199.	2.524	34.451	0.00	2.445	27.496	
1447.	2.255	34.514	0.00	2.160	27.570	
1699.	2.098	34.550	0.00	1.985	27.612	
2001.	1.936	34.585	0.00	1.801	27.655	
2001.	1.936	34.585	0.00	1.801	27.655	
3000.	1.600	34.652	0.00	1.381	27.739	
3504.	1.510	34.649	0.00	1.243	27.747	
4003.	1.497	34.679	0.00	1.178	27.775	
4173.	1.502	34.682	0.00	1.164	27.779	

CAST CG2-91-DI		-087	LAT 52	30.0N	LONG 152	01.2W
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	POT TEMP (C)	SIG-TH	
32.	4.107	32.714	0.00	4.105	25.958	
62.	4.064	32.718	0.00	4.060	25.965	
106.	4.361	33.330	0.00	4.354	26.422	
131.	4.346	33.764	0.00	4.337	26.768	
152.	4.119	33.842	0.00	4.109	26.854	
203.	3.944	33.910	0.00	3.930	26.926	
299.	3.784	34.007	0.00	3.764	27.020	
399.	3.744	34.106	0.00	3.717	27.104	
499.	3.553	34.176	0.00	3.519	27.179	
600.	3.385	34.236	0.00	3.345	27.243	
701.	3.198	34.289	0.00	3.151	27.304	
803.	3.037	34.329	0.00	2.984	27.351	
899.	2.890	34.366	0.00	2.831	27.394	
1003.	2.756	34.398	0.00	2.690	27.432	
1201.	2.543	34.448	0.00	2.464	27.492	
1448.	2.293	34.506	0.00	2.198	27.560	
1698.	2.114	34.544	0.00	2.001	27.606	
1999.	1.941	34.582	0.00	1.806	27.652	
2502.	1.710	34.628	0.00	1.535	27.709	
2502.	1.710	34.628	0.00	1.535	27.709	
3004.	1.577	34.653	0.00	1.358	27.742	
3509.	1.494	34.672	0.00	1.227	27.766	
4005.	1.482	34.681	0.00	1.163	27.778	
4508.	1.495	34.686	0.00	1.119	27.785	

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